SCREENING SITE INSPECTION REPORT
FOR
MARBLE CLIFF QUARRIES DUMP
COLUMBUS, OHIO
U.S. EPA ID: OHD980510226
SS ID: NONE
TDD: F05-8905-012
PAN: F0H0843SB

MARCH 18, 1991

ecology and environment, inc.
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International Specialists in the Environment

SIGNATURE PAGE
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1. INTRODUCTION

Ecology and Environment, Inc., Field Investigation Team (FIT) was tasked by the United States Environmental Protection Agency (U.S. EPA) to conduct a screening site inspection (SSI) of the Marble Cliff Quarries Dump (MCQD) site under contract number 68-01-7347.

The site was initially discovered by the Ohio Environmental Protection Agency (OEPA) Central Office in Columbus, Ohio, when Columbus Coated Fabrics (CCF) responded to the Waste Disposal Site Survey (also known as the Eckhardt Survey).

The site was evaluated in the form of a preliminary assessment (PA) that was submitted to U.S. EPA. The PA was prepared by William M. Schneider, OEPA, Division of Solid Hazardous Waste Management, and is dated September 10, 1985.

FIT prepared an SSI work plan for the MCQD site under technical directive document (TDD) F05-8905-012, issued on March 12, 1989. The SSI work plan was approved by U.S. EPA on March 28, 1990. The SSI of the MCQD site was conducted on June 12, 1990, under amended TDD F05-8905-012, issued on April 10, 1990.

The FIT SSI included an interview with site representatives, a reconnaissance inspection of the site, and the collection of eleven soil/sediment samples.

The purposes of an SSI have been stated by U.S. EPA in a directive outlining Pre-Remedial Program strategies. The directive states:

> All sites will receive a screening SI to 1) collect additional data beyond the PA to enable a more refined

> preliminary HRS [Hazard Ranking System] score, 2) establish priorities among sites most likely to qualify for the NPL [National Priorities List], and 3) identify the most critical data requirements for the listing SI step. A screening SI will not have rigorous data quality objectives (DQOs). Based on the refined preliminary HRS score and other technical judgement factors, the site will then either be designated as NFRAP [no further remedial action planned], or carried forward as an NPL listing candidate. A listing SI will not automatically be done on these sites, however. First, they will go through a management evaluation to determine whether they can be addressed by another authority such as RCRA [Resource Conservation and Recovery Act].... Sites that *are designated NFRAP or deferred to other statutes are* not candidates for a listing SI.
>
> The listing SI will address all the data requirements of the revised HRS using field screening and NPL level DQOs. It may also provide needed data in a format to support remedial investigation work plan development. Only sites that appear to score high enough for listing and that have not been deferred to another authority will receive a listing SI. (U.S. EPA 1988)

U.S. EPA Region V has also instructed FIT to identify sites during the SSI that may require removal action to remediate an immediate human health or environmental threat.

2. SITE BACKGROUND

2.1 INTRODUCTION

This section presents information obtained from SSI work plan preparation, the site representative interview, and the reconnaissance inspection of the site.

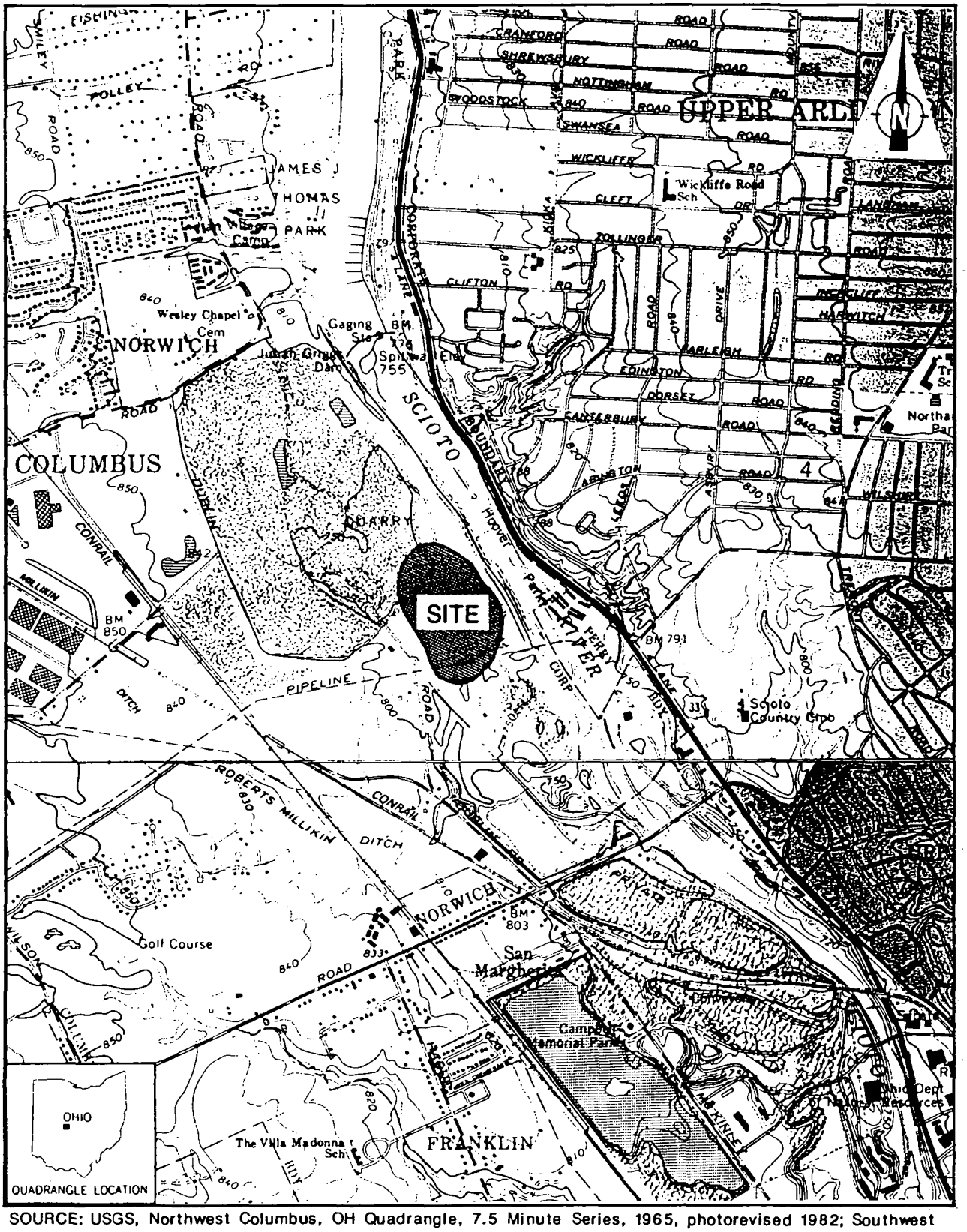
2.2 SITE DESCRIPTION

The MCQD site consists of an inactive landfill, approximately 1 1/2 acres in size, and an adjacent dump located on the west side of the Scioto River, approximately 4,000 feet north of Trabue Road in Columbus, Franklin County, Norwich Township, Ohio (T.1N., R.19W.) (see Figure 2-1 for site location). The site is southeast of the active American Aggregates Corporation quarrying operation, and north of the inactive Marble Cliff Quarries Sanitary Landfill, which was licensed for operation from 1969 through 1974 (Schneider 1985). The dump is located within a mud seam at a depth of approximately 60 feet below the existing grade. The Scioto River is located approximately 300 feet east of the site.

A 4-mile radius map of the MCQD site is provided in Appendix A.

2.3 SITE HISTORY

The name Marble Cliff Quarries Dump has been used to describe several dumps and landfills that are located on the property bordered by the Scioto River to the east, Trabue Road to the south, Dublin Road to the west, and Darby Creek Road to the north. This area is commonly referred to as Marble Cliff Quarries, and all dumps located within this area have been referred to as Marble Cliff Quarry Dumps. For the sake



SOURCE: USGS, Northwest Columbus, OH Quadrangle, 7.5 Minute Series, 1965, photorevised 1982; Southwest Columbus, OH Quadrangle, 7.5 Minute Series, 1965, photorevised 1982.

SCALE
0 ½ 1 MILE

FIGURE 2-1 SITE LOCATION

of clarity, this SSI was conducted on only the landfill that was used solely by CCF in the years 1950 through 1959 and a small dump located south of it (Kaufman 1986). CCF was purchased in 1961 by Borden, Inc. Borden, Inc., agreed to accept full liability for the site. CCF supplied liability insurance and a bond (Buckeye Union Casualty) as security for its undertaking (Kaufman 1986). The MCQD site is currently owned by Specialty Restaurants, Inc., which leases the site to American Aggregates Corporation. It was purchased by Specialty Restaurants, Inc., on December 26, 1985 (Franklin County Auditor 1990).

The boundaries for the SSI were determined from the interview with site representatives Dave Gallimore and Myron Hunt, who are currently employees of American Aggregates. Both men worked as equipment operators at the MCQD site during the time that it was active. During the interview they outlined the MCQD site on an aerial photograph. They also stated that the dump was covered on a nightly basis during its years of operation (Gallimore et al. 1990).

Kaufman Investment Company owned the property during the time that the MCQD site was used by CCF. According to the Notification of Hazardous Waste Site form, section 103(c), submitted by CCF, the dump was used to dispose of organics, inorganics, heavy metals, paints, and pigments (U.S. EPA 1981).

The MCQD site is located in a mud seam, which made the land unsuitable for quarrying because the horizons of stone quarried for commercial purposes were missing. The boundaries of the clay seam in the MCQD site were allegedly based on extensive core drilling (Kaufman 1986).

No subsequent remedial or regulatory actions have taken place at the site.

3. SCREENING SITE INSPECTION PROCEDURES AND FIELD OBSERVATIONS

3.1 INTRODUCTION

This section outlines procedures and observations of the SSI of the MCQD site. Individual subsections address the site representative interview, reconnaissance inspection, and sampling procedures.

Rationales for specific FIT activities are also provided. The SSI was conducted in accordance with the U.S. EPA-approved work plan.

The U.S. EPA Potential Hazardous Waste Site Inspection Report (Form 2070-13) for the MCQD site is provided in Appendix B.

3.2 SITE REPRESENTATIVE INTERVIEW

Randy Earlywine, FIT team leader, conducted an interview with Gallimore and Hunt, employees of American Aggregates. The interview was conducted in the office of an American Aggregates truck garage, which is located slightly west of the site. Hunt and Gallimore were equipment operators at the MCQD site when it was active.

The interview was conducted on June 12, 1990, at 9:30 a.m. The interview was conducted to gather information that would aid FIT in conducting SSI activities. Steve Williamson, Mine Manager for American Aggregates, and Michele Holtom, Environmental Engineer for OEPA, were also present during the interview.

3.3 RECONNAISSANCE INSPECTION

Following the site representative interview, FIT conducted a reconnaissance inspection of the MCQD site and surrounding area in accordance

with Ecology and Environment, Inc. (E & E), health and safety guidelines. The reconnaissance inspection began at 10:52 a.m. on June 12, 1990, and included a walk-through of the site to determine appropriate health and safety requirements for conducting on-site activities and to make observations to aid in characterizing the site. FIT also determined sampling locations during the reconnaissance inspection. FIT was accompanied by Nick Nissley, Environmental Geologist/Corporate Environmentalist for American Aggregates, during the reconnaissance inspection.

Reconnaissance Inspection Observations. The MCQD site is located on the west side of Columbus, Ohio, on property leased to American Aggregates. The land immediately surrounding the site includes an active quarrying operation to the north, reclaimed quarried land to the south and west, and the Scioto River to the east (see Figure 3-1 for site features).

North of the MCQD site FIT observed a large field in which barrels had been discarded by American Aggregates. Some of these barrels were without lids and, according to Nissley, were filled with solvents and liquid wastes from the active quarrying operation. Nissley stated that American Aggregates was currently working on a plan to dispose of the refuse properly. He referred to the area as the bone yard. Slightly west of the bone yard, FIT observed a flume pond. There was a slight slope from the site to the flume pond.

Marble Cliff Quarries, the active quarrying operation north of the MCQD site, appeared to be inaccessible to the public because of fences and security guards. However, the MCQD site has no means of controlling access. FIT observed a road that led from Dublin Road, south of the site, to a series of access roads and trails that intersect and criss-cross the MCQD site. During the investigation, FIT also observed trails left by bicycles and motorcycles on-site.

The topography of the MCQD site is flat, with the exception of small mounds of earth in various locations on and immediately adjacent to the site. The northern portion of the MCQD site is approximately 40 feet higher than the southern portion. A ridge line separates the lower elevation from the higher elevation. Both portions of the site are covered by brush and small trees. In the northwest portion of the site

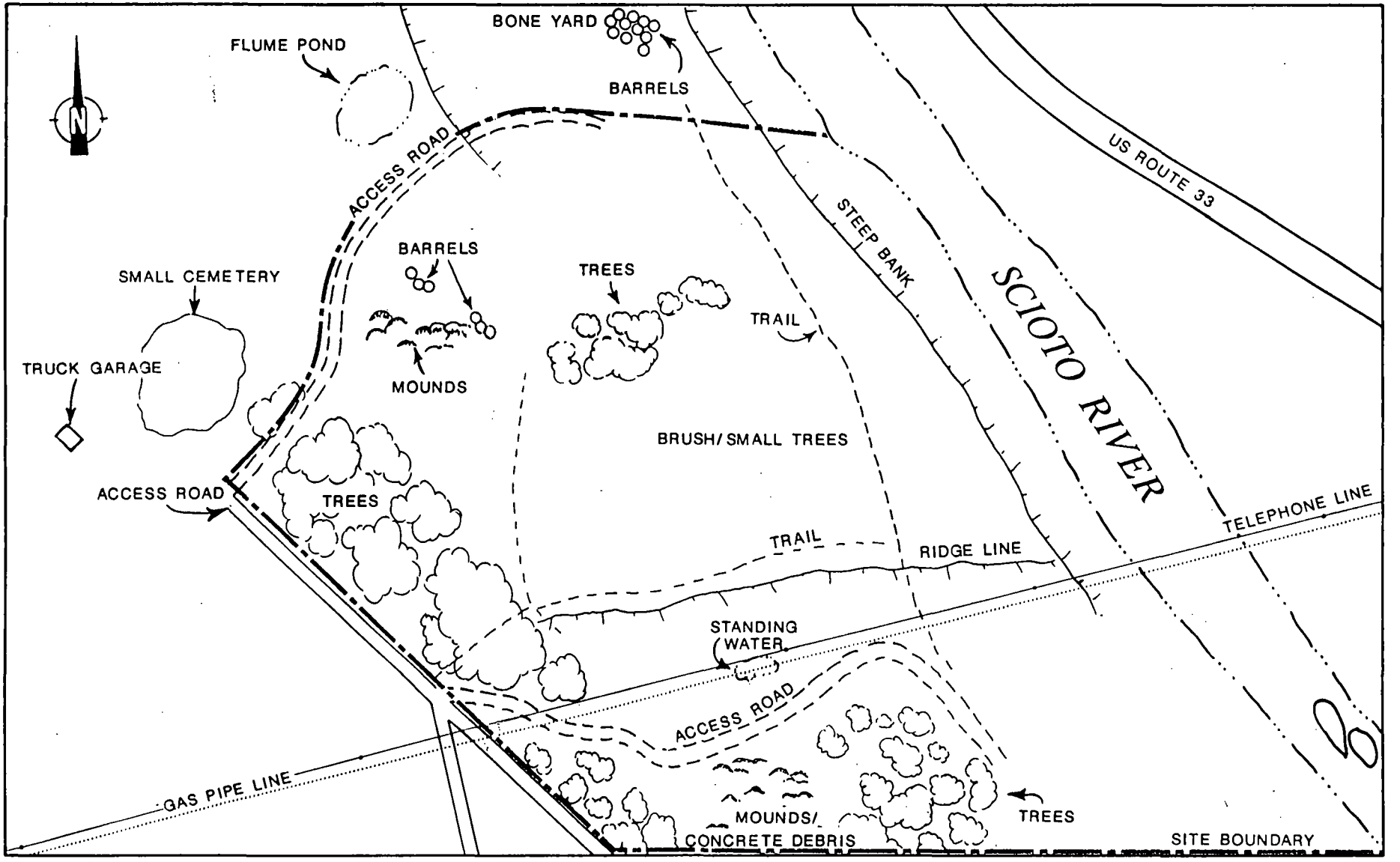


FIGURE 3-1 SITE FEATURES

FIT observed several rusted barrels that were partially buried in small mounds.

The southern portion of the site contains a dump formerly used by employees of the quarries. FIT observed several piles of debris that appeared to have been recently deposited in this area. An access road extends from the western border of the site, along the north side of this dump area, and around to the east of this portion of the dump. This dump consisted of mostly concrete debris and mounds of earth. An old rusty storage tank was observed partially buried here. There was an underground gas line and a telephone line that ran east-west across the southern portion of the site at the base of the ridge line. A small pool of standing water was observed in this portion of the site.

FIT photographs from the SSI of the MCQD site are provided in Appendix C.

3.4 SAMPLING PROCEDURES

Samples were collected by FIT at locations selected during the reconnaissance inspection to determine whether U.S. EPA Target Compound List (TCL) compounds or Target Analyte List (TAL) analytes were present at the site. The TCL and TAL are included with corresponding quantitation/detection limits in Appendix D.

On June 12, 1990, FIT collected eleven soil/sediment samples, including one potential background sample. An offer to share a portion of each soil/sediment sample with the site representatives was declined.

Soil/Sediment Sampling Procedures. Soil sample S1 was collected at a depth of 6 inches on the upper level of the ridge line (see Figure 3-2 for soil/sediment sampling locations). Soil sample S2 was collected at a depth of 12 inches in the dump in the southern portion of the site. Sample S2 was collected near a buried storage tank on top of a small mound. Soil sample S3 was also collected at the base of a small mound located slightly south of the location where sample S2 was collected.

Sample S4 was a sediment sample collected in a small pond at the base of the ridge line, in the southern portion of the site. Sample S4 was collected along the buried gas line. Soil sample S5 was collected at a depth of 6 inches on the upper level of the ridge line. Soil

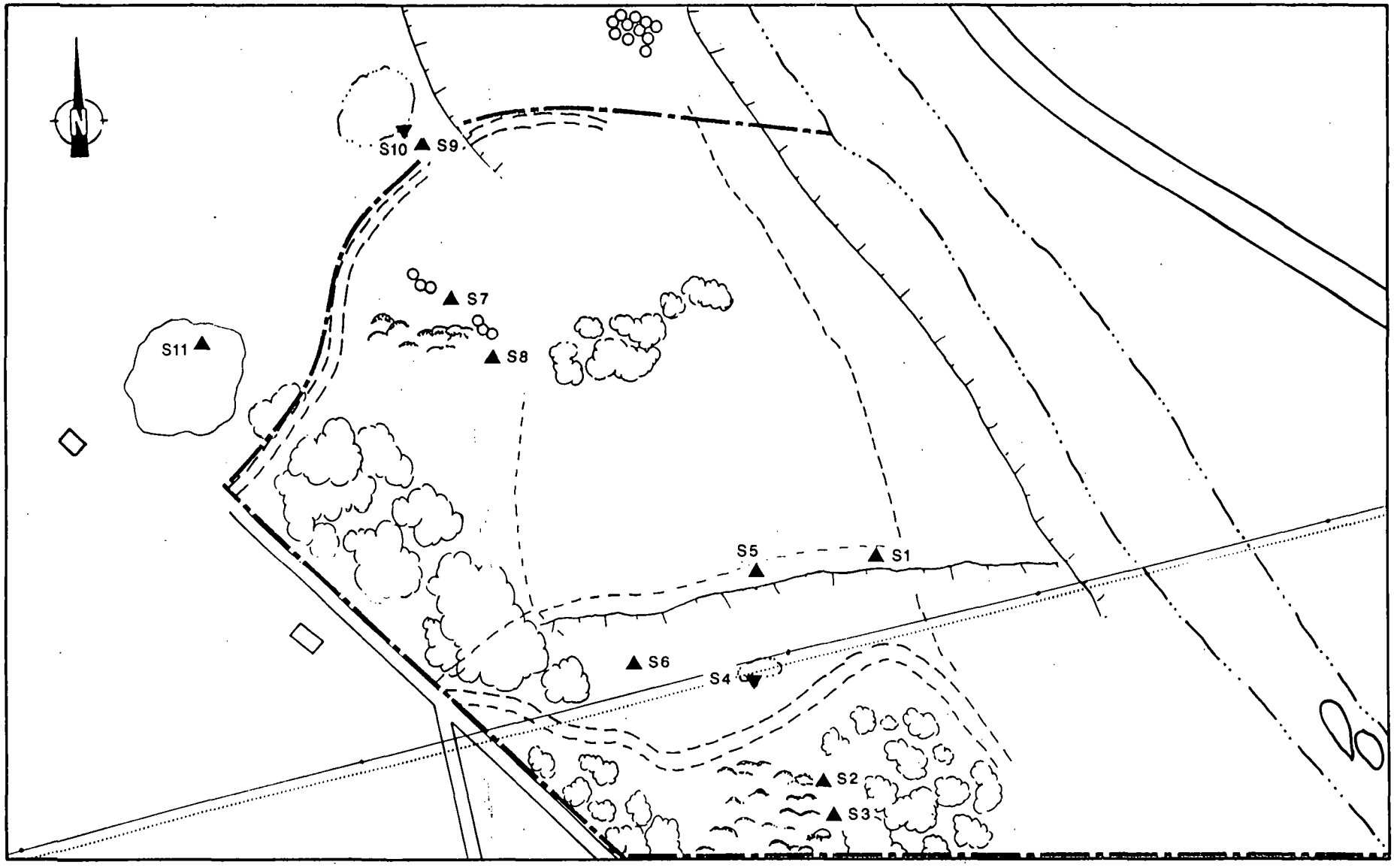


FIGURE 3-2 SOIL/SEDIMENT SAMPLING LOCATIONS

sample S6 was collected at a depth of 1 1/2 feet from a location at the base of the ridge line in the southern portion of the site.

Soil sample S7 was collected on the northwest side of the site. Sample S7 was collected at a depth of 6 inches from a location near some rusted drums and some mounds of earth. Soil sample S8 was collected at a depth of 6 inches, from a location approximately 50 feet south of sample S7. Sample S8 was also collected near rusted drums. Sample S9 was collected near the northern edge of the site. The sample was collected at a depth of 1 1/2 feet in an area of disturbed soil.

Sample S10 was a sediment sample collected at the southern edge of the flume pond. The sample was collected to characterize runoff from the MCQD site to the north. Soil sample S11 was collected as a potential background sample. It was collected northwest of the site in a cemetery, approximately 1,000 feet from the MCQD site. The sample was collected in an effort to determine the chemical characteristics of the soil in the area of the site. Samples were collected using a hand auger, posthole digger, shovel, or trowel. Sample material was transferred directly to a stainless steel mixing bowl. From the bowl it was transferred to the sample bottles with stainless steel spoons (E & E 1987).

Standard E & E decontamination procedures were adhered to during the collection of all soil/sediment samples. The procedures included the scrubbing of all equipment (e.g., hand auger, posthole digger, trowel, shovel, and stainless steel spoons) with a solution of detergent (Alconox) and distilled water, and triple-rinsing the equipment with distilled water before the collection of each sample (E & E 1987). All soil/sediment samples were packaged and shipped in accordance with U.S. EPA-required procedures.

As directed by U.S. EPA, soil/sediment samples were analyzed using the U.S. EPA Contract Laboratory Program (CLP).

4. ANALYTICAL RESULTS

This section presents results of the chemical analysis of FIT-collected soil/sediment samples for TCL compounds and TAL analytes. All samples were analyzed for volatile organics, semivolatile organics, pesticides/polychlorinated biphenyls (PCBs), metals, and cyanides. Complete chemical analysis results of FIT-collected soil/sediment samples are provided in Table 4-1.

In addition, fluorinated hydrocarbons, which were present as significant tentatively identified compounds (TICs) detected in the analysis of FIT-collected samples, are also provided in Table 4-1.

Quantitation/detection limits used in the analysis of soil/sediment samples are provided in Appendix D.

The analytical data for the chemical analysis of soil/sediment samples collected for this SSI have been reviewed by U.S. EPA for compliance with terms of CLP, and the review has been approved by U.S. EPA. The analytical data have also been reviewed by FIT for validity and usability. Any additions, deletions, or changes to the data have been incorporated in the chemical analysis results tables presented in this section.

APPENDIX C

FIT SITE PHOTOGRAPHS

Table 4-1
RESULTS OF CHEMICAL ANALYSIS OF
FIT-COLLECTED SOIL/SEDIMENT SAMPLES

Sample Collection Information and Parameters	S1	S2	S3	S4	S5	Sample Numbe S6
Date	6/12/90	6/12/90	6/12/90	6/12/90	6/12/90	6/12/90
Time	1250	1320	1330	1500	1510	1450
CLP Organic Traffic Report Number	EKN65	EKN66	EKN67	EKN68	EKN69	EKN70
CLP Inorganic Traffic Report Number	MEKN50	MEKN51	MEKN52	MEKN53	MEKN54	MEKN55
Compound Detected (values in µg/kg)						
Volatile Organics						
methylene chloride	65J	60J	70J	74J	67J	14J
carbon disulfide	--	--	1.0J	--	2J	--
1,2-dichloroethane	2J	--	--	--	--	--
1,1,1-trichloroethane	2J	--	1J	2J	2J	--
trichloroethene	4J	--	--	--	--	--
1,1,2-trichloroethane	1J	--	--	--	--	--
benzene	2J	--	--	--	--	--
tetrachloroethene	16J	--	--	--	2J	--
toluene	1J	2J	3J	1J	2J	--
1,1,2,2-tetrachloroethane	17J	--	--	--	--	--
chlorobenzene	1J	--	--	--	--	--
Semivolatile Organics						
phenanthrene	--	--	--	--	--	260J
anthracene	--	--	--	--	--	100J
fluoranthene	--	190J	--	--	--	430J
pyrene	--	190J	--	--	--	920
benzo[a]anthracene	--	93J	--	--	--	680
chrysene	--	140J	--	--	--	920
bis(2-ethylhexyl)phthalate	--	--	--	--	--	--
di-n-octylphthalate	--	--	--	--	--	--
benzo[b]fluoranthene	--	--	--	--	--	2,000
benzo[k]fluoranthene	--	--	--	--	--	2,300
benzo[a]pyrene	--	--	--	--	--	2,500
indeno[1,2,3-cd]pyrene	--	--	--	--	--	1,700J
benzo[g,h,i]perylene	--	--	--	--	--	2,100J
TICs†						
freon 113 (76-13-1)	--	--	--	--	--	--
dichlorodifluoromethane (75-43-4)	--	--	--	--	--	--

Table 4-1 (Cont.)

Sample Collection Information and Parameters	S1	S2	S3	S4	S5	S6	Sample Numbe
trichlorofluoromethane (359-29-5)	--	--	--	--	--	--	
1,2-dichloro-1,1,2-trifluoro (354-23-4)	--	--	--	--	--	--	
trimethyl silanol (1066-40-6)	--	--	--	--	--	--	
Analyte Detected (values in mg/kg)							
aluminum	5,000	17,900	570	9,720	1,070	1,360	
arsenic	9NJ	9.7NJ	2.2BNJ	5.9NJ	2NJ	1.4BNJ	
barium	213	210	617	99.9	25.6B	41.8B	
beryllium	0.48B	0.87B	--	0.38B	--	--	
cadmium	--	--	--	--	--	--	
calcium	101,528	19,100	198,000	122,000	249,000	220,000	
chromium	9.5	20.9	6.1	15.3	11	9.9	
cobalt	8B	7.8B	--	5.3B	--	--	
copper	28.2EJ	25.7EJ	16.6EJ	23.1EJ	20.2EJ	19.1EJ	
iron	12,600	25,400	1,830	14,700	2,610	2,400	
lead	9.8NJ	22.9+NJ	2.8NJ	14.3NJ	2.8NJ	4.5NJ	
magnesium	39,500	4,390	56,800	56,000	111,000	94,000	
manganese	191	921	82.9	372	92.9	93.4	
mercury	--	0.14	--	--	--	0.97	
nickel	29.9	31.6	9.7	23.8	18.6	14.2	
potassium	943BJ	2,880	342BJ	1,370B	319BJ	243BJ	
selenium	--	--	--	--	--	--	
sodium	170B	88B	168B	212B	193B	212B	
thallium	0.52B	--	--	--	--	--	
vanadium	11.4B	36.7	1.5B	18.5	2.4B	1.8B	
zinc	77.4	89.7	25.3	64.8	63.7	37.1	
cyanide	1.8	--	--	--	--	--	

-- Not detected.

† TIC Chemical Abstracts Service (CAS) numbers, if available, are provided in parentheses.

Table 4-1 (Cont.)

COMPOUND QUALIFIERS	DEFINITION
J	Indicates an estimated value.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.

ANALYTE QUALIFIERS	DEFINITION
E	Estimated or not reported due to interference. See laboratory narrative.
N	Spike recoveries outside QC protocols, which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.
+	Correlation coefficient for standard additions is less than 0.995. See review and laboratory narrative.
B	Value is real, but is above instrument DL and below CRDL.
J	Value is above CRDL and is an estimated value because of a QC protocol.

S7	S8	S9	S10	S11
6/12/90	6/12/90	6/12/90	6/12/90	6/12/90
1530	1545	1600	1600	1630
EKN71	EKN72	EKN73	EKN74	EKN75
MEKN56	MEKN57	MEKN58	MEKN59	MEKN60
51J	49J	21J	22J	47J
--	--	--	--	--
--	--	--	--	--
--	--	3J	2J	--
--	--	--	--	--
--	--	--	--	--
--	--	--	--	--
--	--	3J	--	--
2J	--	2J	--	--
--	--	--	--	--
--	--	--	--	--
110J	510J	--	--	--
--	180J	--	--	--
--	490J	--	--	--
140J	1,300	--	--	--
--	550J	--	--	--
100J	560J	--	--	--
51,000D	--	93J	--	--
12,000	--	--	--	--
--	3,600	--	--	--
--	--	--	--	--
--	2,600	--	--	--
--	2,500J	--	--	--
--	3,800J	--	--	--
52J	--	230J	36J	93J
--	--	57J	--	4,400J

S7	S8	S9	S10	S11
--	--	43J	--	180J
--	--	8.9J	--	76J
--	--	--	--	7.0J
1,400	822	1,410	1,090	15,700
14.9NJ	1.4BNJ	2BNJ	2.1BNJ	9.6NJ
4,590	100	238	248	186
0.56B	--	--	--	0.8B
4.2	--	--	--	--
2,100	266,000	217,000	216,000	30,800
28.2	8.5	10.3	9.7	20
10.7B	--	--	--	8.1B
39.9EJ	20.5EJ	19.5EJ	18.8EJ	26.2EJ
0,500	1,920	2,800	2,490	26,000
320NJ	13.9+NJ	2.1NJ	2.1NJ	30.6NJ
5,600	72,100	91,500	87,100	5,590
392	88.7	76.2	88.8	812
0.19	--	--	--	0.12
26.8	8.7B	19.7	12.6	34.1
1,610	258BJ	521BJ	490BJ	2,160
0.73B	--	--	--	0.49B
170B	193B	178B	225B	126B
0.73B	--	--	--	--
21.9	2.7B	3B	2B	31.6
4,300	33.7	58.6	39.1	89.6
--	--	--	--	--

INTERPRETATION

Compound value may be semiquantitative.

Alerts data user to a possible change in the CRQL. Data is quantitative.

INTERPRETATION

Analyte or element was not detected, or value may be semiquantitative.

Value may be quantitative or semiquantitative.

Data value may be biased.

Value may be quantitative or semiquantitative.

Value may be semiquantitative.

A

APPENDIX A

SITE 4-MILE RADIUS MAP

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

EPA

I. IDENTIFICATION
01 STATE: OH | 02 SITE NUMBER: OOO428089 7

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER				
Marble Cliff Quarries Dump	3101 Trabue Rd				
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 COUNTY**	**07 COUNTY CODE**	**08 CONG DIST**
Columbus	OH	43212	FRANKLIN	049	12

09 COORDINATES LATITUDE 40 00 20.N | LONGITUDE 083 05 18.W

10 TYPE OF OWNERSHIP (Check one)
☒ A. PRIVATE ☐ B. FEDERAL ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION: 06,12,90 (MONTH DAY YEAR)

02 SITE STATUS: ☐ ACTIVE ☒ INACTIVE

03 YEARS OF OPERATION: 1950 (BEGINNING YEAR) 1959 (ENDING YEAR) ☐ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)
☐ A. EPA ☒ B. EPA CONTRACTOR (Name of firm): Ecology and Environment ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR (Name of firm)
☐ E. STATE ☐ F. STATE CONTRACTOR (Name of firm) ☐ G. OTHER (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
RANDY EARLYWINE	Civil Engineer / Team Leader	Ecology and Environment	(312) 663 9415
09 OTHER INSPECTORS	**10 TITLE**	**11 ORGANIZATION**	**12 TELEPHONE NO.**
Tim Danzer	Geographer / Team member	Ecology and Environment	(312) 663 9415
Jeryl Kolb	Biologist / SAFETY OFFICER	Ecology and Environment	(312) 663-9415
Julie Visser	community Health specialist / Sampler	Ecology and Environment	(312) 663 9415
Rod Hackler	Geologist / Team Member	Ecology and Environment	(312) 663-9415
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Steve Williamson	Manager	American Aggregates	(513) 548-2111
Dave Gallimore	Employee	American Aggregates	(513) 548-2111
Myron Hunt	Employee	American Aggregates	(513) 548-2111
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	9:00 AM	Partly Cloudy, Slight breeze 70 - 80°

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Michele Holtem	Ohio Environmental Protection Agency	(614) 771-7505

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Randy Earlywine	U.S. EPA	Ecology and Environment	312 663 9415	9,16,90 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OH	0004280897

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ☒ A. SOLID
- ☒ B. POWDER, FINES
- ☒ C. SLUDGE
- ☐ D. OTHER _____ (Specify)
- ☐ E. SLURRY
- ☒ F. LIQUID
- ☐ G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS: UNKNOWN

CUBIC YARDS: _____

NO. OF DRUMS: _____

03 WASTE CHARACTERISTICS (Check all that apply)

- ☒ A. TOXIC
- ☒ B. CORROSIVE
- ☐ C. RADIOACTIVE
- ☒ D. PERSISTENT
- ☐ E. SOLUBLE
- ☐ F. INFECTIOUS
- ☐ G. FLAMMABLE
- ☐ H. IGNITABLE
- ☐ I. HIGHLY VOLATILE
- ☐ J. EXPLOSIVE
- ☐ K. REACTIVE
- ☐ L. INCOMPATIBLE
- ☐ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	UNKNOWN	UNKNOWN	
OLW	OILY WASTE	UNKNOWN	UNKNOWN	Waste Characteristics identified through soil and sediment samples collected by FIT on June 12, 1990.
SOL	SOLVENTS	UNKNOWN	UNKNOWN	
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	UNKNOWN	UNKNOWN	
IOC	INORGANIC CHEMICALS	UNKNOWN	UNKNOWN	
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	UNKNOWN	UNKNOWN	

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
	See Table 4-1 in Section 4 of Narrative.				

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	N/A		FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Ecology and Environment, Inc. June 12th 1990 screening site inspection.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: OH. | 02 SITE NUMBER: D004200897

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 2,349 — 04 NARRATIVE DESCRIPTION

See subsection 5.2 for groundwater information.

01 ☒ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION

See subsection 5.3 for surface water information.

01 ☐ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION

See subsection 5.4 for air information

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION

See subsection 5.5 for fire/explosion information.

01 ☒ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ~3600 — 04 NARRATIVE DESCRIPTION

See subsection 5.6 for Direct Contact information

01 ☒ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE: 6-12-90) — ☐ POTENTIAL — ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: ~8 (Acres) — 04 NARRATIVE DESCRIPTION

See section 4 and subsections 5.2 and 5.3

01 ☒ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 2,349 — 04 NARRATIVE DESCRIPTION

See subsection 5.2 for drinking water information

01 ☐ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION

site is currently inactive.

01 ☒ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Population within a 4 mile radius site.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: OH | 02 SITE NUMBER: D004280097

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☒ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

TCL compounds and TAL analytes were detected in on-site soils and could potentially harm vegetation

01 ☒ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)

Animals may be affected by direct contact or by eating contaminated plantlife

01 ☒ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

See J and K above

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids, Leaking drums) — 02 ☒ OBSERVED (DATE: 6-12-90) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 2349
04 NARRATIVE DESCRIPTION

The dump appears to be well covered. However on the west side rusted barrels were observed protruding from fill.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Because the site has an uncontrolled access road, unauthorized dumping could occur. FIT noted construction debris during its investigation.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

N/A

III. TOTAL POPULATION POTENTIALLY AFFECTED: 3,600

IV. COMMENTS

N/A

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Ecology and Environment, INC. June 12, 1990
Screening site inspection.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OH	D004280 897

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☒ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☐ A. SURFACE IMPOUNDMENT		
☐ B. PILES		
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☒ F. LANDFILL	UNKNOWN	UNKNOWN
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)
- ☐ A. INCINERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER (Specify) NA

05 OTHER
- ☐ A. BUILDINGS ON SITE

NO BUILDINGS

06 AREA OF SITE

≈ 5 (Acres)

07 COMMENTS

Mudseam where wastes were deposited is allegedly only 1.5 acres. However, because the boundaries were not clearly identified FIT performed an investigation on approximately 8 acres of ground.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☐ B. MODERATE ☐ C. INADEQUATE, POOR ☒ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

No liner was used for fill. Site is very well covered and vegetation has begun to grow. However on the west side FIT did note some rusty barrels protruding from fill

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☒ YES ☐ NO

02 COMMENTS

site is not fenced or patrolled to keep the public out.

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

Ecology and Environment, INC. JUNE 12 1990
Screening Site Inspection.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OH	D004280897

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)	SURFACE	WELL	02 STATUS	ENDANGERED	AFFECTED	MONITORED	03 DISTANCE TO SITE
COMMUNITY	A. ☐	B. ☒		A. ☐	B. ☐	C. ☐	A. 9 miles (mi)
NON-COMMUNITY	C. ☐	D. ☒	UNKNOWN	☐	E. ☐	F. ☐	B. 1/2 mile (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☐ A. ONLY SOURCE FOR DRINKING ☒ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available) ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available) ☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER	03 DISTANCE TO NEAREST DRINKING WATER WELL
2,349	1/2 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
0 (ft)	EAST	0 (ft)	~250,000 (gpd)	☐ YES ☒ NO

09 DESCRIPTION OF WELLS (Including useage, depth, and location relative to population and buildings) Majority of residents are now on municipal water systems. However, there is an area west of the Scioto River that uses wells. Closer to the river there appears to be less overburden and as a result shallower aquifer. Closer to I-270 the overburden is thicker, up to 50 feet of clay, and well logs indicate deeper wells.

10 RECHARGE AREA	COMMENTS	11 DISCHARGE AREA	COMMENTS
☐ YES ☐ NO	UNKNOWN	☐ YES ☐ NO	UNKNOWN

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☒ A. RESERVOIR, RECREATION DRINKING WATER SOURCE ☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES ☐ C. COMMERCIAL, INDUSTRIAL ☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Scioto River	☐	~0.1 (mi)
	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 3600 NO. OF PERSONS	B. 21,600 NO. OF PERSONS	C. 42,312 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION: ~.01 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE	04 DISTANCE TO NEAREST OFF-SITE BUILDING
~2550	~.01 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

The site is located near quarrying operations and is sparsely populated on the west side of the Scioto River. However, the cities of Columbus and Upper Arlington are both within 1 mile.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION
01 STATE: OH | 02 SITE NUMBER: DOOA 280 897

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☒ B. $10^{-4} - 10^{-6}$ cm/sec ☐ C. $10^{-4} - 10^{-3}$ cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☒ B. RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-6}$ cm/sec) ☐ C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH	
~ 70' (ft)	UNKNOWN (ft)	UNKNOWN	

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
~7.0 (in)	2.0 (in)	≤ 3 %	South then East	≤ 8 %

09 FLOOD POTENTIAL
SITE IS IN 100 YEAR FLOODPLAIN

10
☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY
N/A

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE	OTHER
A. N/A (mi)	B. > 2 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)
N/A (mi)
ENDANGERED SPECIES: _____

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AG LAND
A. ~0.1 (mi)	B. ~0.2 (mi)	C. UNKNOWN (mi)	D. ~1 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

See Appendix A

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Ecology and Environment, INC. JUNE 12 1990
SCREENING SITE INSPECTION.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OH	D004 280 997

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER		See Subsection 5.2	
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL		see subsection 3.4	
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
OVA	0 PPM no reading above background
Combo Meter	NO READING ABOVE BACKGROUND
Rad Mini	NO READING ABOVE BACKGROUND
MONITOX	NO READING ABOVE BACKGROUND

IV. PHOTOGRAPHS AND MAPS

01 TYPE ■ GROUND □ AERIAL

02 IN CUSTODY OF Ecology and Environment INC.
(Name of organization or individual)

03 MAPS ■ YES □ NO

04 LOCATION OF MAPS Ecology and Environment INC.

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

See table 4.1

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

ECOLOGY AND ENVIRONMENT, INC. JUNE 12 1990
Screening site inspection.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OH	D004 280 897

II. CURRENT OWNER(S)

01 NAME: Specialty Restaurants Corp.	02 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.): 2209 S. State BLVD SUITE 300		04 SIC CODE	
05 CITY: Anaheim	06 STATE: Ca	07 ZIP CODE: 92806	
01 NAME	02 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	
01 NAME	02 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	
01 NAME	02 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	

PARENT COMPANY (If applicable)

08 NAME	09 D+B NUMBER		
10 STREET ADDRESS (P.O. Box, RFD #, etc.)		11 SIC CODE	
12 CITY	13 STATE	14 ZIP CODE	
08 NAME	09 D+B NUMBER		
10 STREET ADDRESS (P.O. Box, RFD #, etc.)		11 SIC CODE	
12 CITY	13 STATE	14 ZIP CODE	
08 NAME	09 D+B NUMBER		
10 STREET ADDRESS (P.O. Box, RFD #, etc.)		11 SIC CODE	
12 CITY	13 STATE	14 ZIP CODE	
08 NAME	09 D+B NUMBER		
10 STREET ADDRESS (P.O. Box, RFD #, etc.)		11 SIC CODE	
12 CITY	13 STATE	14 ZIP CODE	

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME: Kaufman Investment Co.	02 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.): 2151 E. Dublin-Granville Rd		04 SIC CODE	
05 CITY: Columbus	06 STATE: OH	07 ZIP CODE: 43229	
01 NAME	02 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	
01 NAME	02 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	

IV. REALTY OWNER(S) (If applicable; list most recent first)

01 NAME	02 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	
01 NAME	02 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	
01 NAME	02 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Ecology and ENVIRONMENT, INC., JUNE 12th 1990
Screening site Inspection

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OH	D004280897

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME	02 D+B NUMBER
N/A	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME	11 D+B NUMBER
N/A	

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER
Kaufman Investment Co.		N/A	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE
2151 E. DUBLIN-GRANVILLE RD.			

05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
Columbus	OH	43229			

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Ecology and Environment, INC. JUNE 12th 1990

Screening site Inspection.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OH	D004 280 897

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
N/A	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
Columbus Coated Fabrics			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
1280 N. Grant Ave.			
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
Columbus	OH 43201		
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Ecology and Environment, INC. JUNE 12th 1990

Screening Site Inspection

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE: OH | 02 SITE NUMBER: D004280897

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED | 02 DATE | 03 AGENCY
04 DESCRIPTION
NO

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED | 02 DATE | 03 AGENCY
04 DESCRIPTION
NO

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED | 02 DATE | 03 AGENCY
04 DESCRIPTION
NO

01 ☐ D. SPILLED MATERIAL REMOVED | 02 DATE | 03 AGENCY
04 DESCRIPTION
NO

01 ☐ E. CONTAMINATED SOIL REMOVED | 02 DATE | 03 AGENCY
04 DESCRIPTION
NO

01 ☐ F. WASTE REPACKAGED | 02 DATE | 03 AGENCY
04 DESCRIPTION
NO

01 ☐ G. WASTE DISPOSED ELSEWHERE | 02 DATE | 03 AGENCY
04 DESCRIPTION
NO

01 ☐ H. ON SITE BURIAL | 02 DATE | 03 AGENCY
04 DESCRIPTION
NO

01 ☐ I. IN SITU CHEMICAL TREATMENT | 02 DATE | 03 AGENCY
04 DESCRIPTION
NO

01 ☐ J. IN SITU BIOLOGICAL TREATMENT | 02 DATE | 03 AGENCY
04 DESCRIPTION
NO

01 ☐ K. IN SITU PHYSICAL TREATMENT | 02 DATE | 03 AGENCY
04 DESCRIPTION
NO

01 ☐ L. ENCAPSULATION | 02 DATE | 03 AGENCY
04 DESCRIPTION
NO

01 ☐ M. EMERGENCY WASTE TREATMENT | 02 DATE | 03 AGENCY
04 DESCRIPTION
NO

01 ☐ N. CUTOFF WALLS | 02 DATE | 03 AGENCY
04 DESCRIPTION
NO

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION | 02 DATE | 03 AGENCY
04 DESCRIPTION
NO

01 ☐ P. CUTOFF TRENCHES/SUMP | 02 DATE | 03 AGENCY
04 DESCRIPTION
NO

01 ☐ Q. SUBSURFACE CUTOFF WALL | 02 DATE | 03 AGENCY
04 DESCRIPTION
NO

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION
01 STATE: OH | 02 SITE NUMBER: 280897

II PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION: NO

01 ☐ S. CAPPING/COVERING | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION: NO

01 ☐ T. BULK TANKAGE REPAIRED | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION: NO

01 ☐ U. GROUT CURTAIN CONSTRUCTED | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION: NO

01 ☐ V. BOTTOM SEALED | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION: NO

01 ☐ W. GAS CONTROL | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION: NO

01 ☐ X. FIRE CONTROL | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION: NO

01 ☐ Y. LEACHATE TREATMENT | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION: NO

01 ☐ Z. AREA EVACUATED | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION: NO

01 ☐ 1. ACCESS TO SITE RESTRICTED | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION: NO

01 ☐ 2. POPULATION RELOCATED | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION: NO

01 ☐ 3. OTHER REMEDIAL ACTIVITIES | 02 DATE _____ | 03 AGENCY _____
04 DESCRIPTION: NO

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Ecology and Environment INC. JUNE 12th 1990
Screening site Inspection

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OH	280897

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ■ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

N/A

III. SOURCES OF INFORMATION (Cite specific references, e.g., State files, sample analysis, reports)

Ecology and Environment, INC. JUNE 12th 1990
Screening site Inspection.

EPA FORM 2070-13 (7-81)

B

5. DISCUSSION OF MIGRATION PATHWAYS

5.1 INTRODUCTION

This section presents discussions of data and information pertaining to potential migration pathways and targets of TCL compounds and TAL analytes that are possibly attributable to the MCQD site.

The five migration pathways of concern discussed are groundwater, surface water, air, fire and explosion, and direct contact.

5.2 GROUNDWATER

TCL compounds were detected at levels above background concentrations in soil samples collected during the SSI. Sample S1 contained tetrachloroethane at 16J µg/kg. Sample S6 contained benzo[k]fluoranthene at 2,300 µg/kg. Sample S7 contained the highest concentrations of polyaromatic hydrocarbons (PAHs): bis(2-ethylhexyl)phthalate at 51,000D µg/kg and di-n-octylphthalate at 12,000 µ/kg. Sample S8 contained several PAHs, most notably benzo[b]fluoranthene at 3,600 µg/kg (see Table 4-1 for definition and interpretation of qualifiers).

TAL analytes were also detected at levels above background concentrations in soil samples. Sample S5 contained magnesium at 111,000 mg/kg. Sample S7 contained the most significant TAL analytes: barium at 4,590 mg/kg, cadmium at 4.2 mg/kg, lead at 320NJ mg/kg, and zinc at 4,300 mg/kg.

The work plan for the MCQD site did not call for the collection of residential well samples. In response to an OEPA request for groundwater information, FIT consulted an SSI that had been performed on a site located approximately 1 mile south of the MCQD site. This site was

selected because groundwater flow in the area of the site is presumed to be south and east, toward the Scioto River. Results of residential well samples collected during that SSI detected zinc at 1,120 µg/L. This was the only TCL compound or TAL analyte detected that could suggest a possible connection to the MCQD site (E & E 1989).

The landfill is allegedly 60 feet below the surrounding terrain at its greatest depth. Rock was mined from the bedrock formation in areas near the site. This suggests that the mud seam into which wastes were deposited is not laterally continuous. Therefore, there is a strong potential for TCL compounds and TAL analytes to migrate to groundwater.

The potential for contaminants to migrate to groundwater is also affected by the geology of the area of the site. Surficial deposits in the area of the site consist of varying amounts of alluvial sands, outwash sands and gravels, and fine-grained glacial tills. A review of area well logs indicates that the amount and type of unconsolidated deposit varies from one location to another. Along the Scioto River, in the vicinity of the site, the depth of these deposits varies from 1 foot to 68 feet (see Appendix E for well logs of the area of the site). These deposits overlie a bedrock formation composed of limestone and dolomite of Devonian and Silurian age (Ohio Department of Natural Resources [ODNR] 1958). This forms the aquifer of concern (AOC) in the area of the site.

The potential targets of groundwater contamination within a 3-mile radius of the site include only those residents who draw water from private wells. According to Bill Haiker, hydrogeologist with ODNR, the area served by private wells is bordered on the north by Davidson Road, on the south by Fisher Road, on the west by I-270, and on the east by the Scioto River (Haiker 1990). This area includes the unincorporated portions of Norwich and Franklin townships (U.S. Bureau of the Census 1982).

The population potentially affected by the migration of TCL compounds and TAL analytes to groundwater is approximately 2,349 persons. This figure was calculated by counting houses within a 3-mile radius of the site on United States Geological Survey (USGS) topographic maps

(USGS 1965, 1965a, 1966, 1966a). The number of houses was then multiplied by a persons-per-household value of 2.61 for Franklin County, Ohio (U.S. Bureau of the Census 1982).

5.3 SURFACE WATER

An overland surface water migration pathway from the site does exist. The topography of the site slopes down toward the east. Therefore, rainwater runoff appears to flow east to the Scioto River from both the northern and southern portions of the site.

If TCL compounds and TAL analytes present on-site are migrating into the aquifer, and contaminated groundwater is being drawn as influent into the Scioto River, then another pathway to surface water may exist. No hydrogeological studies have been conducted to evaluate this pathway.

5.4 AIR

A release of TCL compounds or TAL analytes to the air was not documented during the SSI of the MCQD site. During the reconnaissance inspection, FIT site-entry instruments (OVA, oxygen meter, explosimeter, hydrogen cyanide monitor, and radiation monitor) did not detect levels above background concentrations at the site. In accordance with the U.S. EPA-approved work plan, further air monitoring was not conducted by FIT.

A potential does not exist for TCL compounds and TAL analytes to migrate from the site via windblown particulates because the site is heavily vegetated.

5.5 FIRE AND EXPLOSION

According to federal, state, and local file information reviewed by FIT, and an interview with Robert Peters of the Marble Cliff Fire Department, no documentation exists of an incident of fire or explosion at the site (Peters 1990). According to FIT observations and site-entry equipment readings, no potential for fire or explosion existed at the site at the time of the SSI.

5.6 DIRECT CONTACT

According to federal, state, and local file information reviewed by FIT, observations made during the SSI, and the interview with site representatives, no incidents of direct contact with TCL compounds or TAL analytes at the MCQD site have been documented.

However, a potential does exist for persons to come into contact with TCL compounds and TAL analytes at the site because there are no means of controlling access to the site. Paths left by bicycles and motorcycles indicate that the site has been used for recreational purposes.

The population within a 1-mile radius of the site potentially affected through direct contact with TCL compounds and TAL analytes at the site is 3,600 persons. This population was calculated by counting houses within a 1-mile radius of the site on USGS topographic maps (USGS 1965, 1965a) and multiplying this number by a persons-per-household value of 2.61 (U.S. Bureau of the Census 1982).

The population calculated in this manner was added to the number of persons residing within a 1-mile radius of the site in the cities of Marble Cliff and Upper Arlington. A planimeter was used to determine the portion of each city within a 1-mile radius, and the area was then multiplied by the population density of the city.

6. REFERENCES

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U.S. Bureau of the Census, 1982, 1980 Census of Population, Characteristics of the Population, General Population Characteristics, Ohio, Washington, D.C.

U.S. EPA, April 15, 1981, Notification of Hazardous Waste Site form, section 103(c), for the MCQD site, prepared by CCF.

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_____, 1965a, photorevised 1982, Southwest Columbus, Ohio Quadrangle, 7.5 Minute Series: 1:24,000.

_____, 1966, photorevised 1981, Galloway, Ohio Quadrangle, 7.5 Minute Series: 1:24,000.

_____, 1966a, photorevised 1973, Hillard, Ohio Quadrangle, 7.5 Minute Series: 1:24,000.

5808:8

APPENDIX B

U.S. EPA FORM 2070-13

C

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Marble Cliff Quarries Dump PAGE 1 OF 11

U.S. EPA ID: OHD004280897 TDD: F05-8905-012 PAN: FOH0843SB

DATE: 6-12-90

TIME: 1250

DIRECTION OF PHOTOGRAPH: NORTH

WEATHER CONDITIONS: 70-80° breezy Partly Cloudy

PHOTOGRAPHED BY: R. Earlywine

SAMPLE ID (if applicable): S1

DESCRIPTION: Close up of Sample S1

DATE: 6-12-90

TIME: 1250

DIRECTION OF PHOTOGRAPH: NORTH

WEATHER CONDITIONS: 70-80° breezy Partly Cloudy

PHOTOGRAPHED BY: R. Earlywine

SAMPLE ID (if applicable): S1

DESCRIPTION: Perspective view of Sample S1

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Marble Cliff Quarries Dump PAGE 2 OF 11

U.S. EPA ID: OHD004280897 TDD: F05-8905-012 PAN: FOH0843SB

DATE: 6-12-90

TIME: 1320

DIRECTION OF PHOTOGRAPH: NORTH

WEATHER CONDITIONS: 70-80° breezy Partly Cloudy

PHOTOGRAPHED BY: R. Earlywine

SAMPLE ID (if applicable): S2

DESCRIPTION: Close up of Sample S2

DATE: 6-12-90

TIME: 1320

DIRECTION OF PHOTOGRAPH: NORTH

WEATHER CONDITIONS: 70-80° breezy Partly Cloudy

PHOTOGRAPHED BY: R. Earlywine

SAMPLE ID (if applicable): S2

DESCRIPTION: Perspective view of Sample S2

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Marble Cliff Quarries Dump PAGE 3 OF 11

U.S. EPA ID: OHD004280897 TDD: F05-8905-012 PAN: FOH0843SB

DATE: 6-12-90

TIME: 1330

DIRECTION OF PHOTOGRAPH: WEST

WEATHER CONDITIONS: 70-80° breezy Partly Cloudy

PHOTOGRAPHED BY: R. Earlywine

SAMPLE ID (if applicable): S3

DESCRIPTION: Close up of Sample S3

DATE: 6-12-90

TIME: 1330

DIRECTION OF PHOTOGRAPH: WEST

WEATHER CONDITIONS: 70-80° breezy Partly Cloudy

PHOTOGRAPHED BY: R. Earlywine

SAMPLE ID (if applicable): S3

DESCRIPTION: Perspective view of Sample S3

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Marble Cliff Quarries Dump PAGE 4 OF 11

U.S. EPA ID: OHD004280897 TDD: F05-8905-012 PAN: FOH043SB

DATE: 6-12-90

TIME: 1500

DIRECTION OF PHOTOGRAPH: West

WEATHER CONDITIONS: 70-80° breezy Partly Cloudy

PHOTOGRAPHED BY: R. Earlywine

SAMPLE ID (if applicable): S4

DESCRIPTION: Close up of Sample S4

DATE: 6-12-90

TIME: 1500

DIRECTION OF PHOTOGRAPH: west

WEATHER CONDITIONS: 70-80° breezy Partly Cloudy

PHOTOGRAPHED BY: R. Earlywine

SAMPLE ID (if applicable): S4

DESCRIPTION: Perspective view of Sample S4

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Marble Cliff Quarries Dump PAGE 5 OF 11

U.S. EPA ID: OHD004280897 TDD: F05-8905-012 PAN: F0H0843SB

DATE: 6-12-90

TIME: 1510

DIRECTION OF PHOTOGRAPH: NORTH

WEATHER CONDITIONS: 70-80° breezy Partly Cloudy

PHOTOGRAPHED BY: R. Earlywine

SAMPLE ID (if applicable): S5

DESCRIPTION: Close up of Sample S5

DATE: 6-12-90

TIME: 1510

DIRECTION OF PHOTOGRAPH: NORTH

WEATHER CONDITIONS: 70-80° breezy Partly Cloudy

PHOTOGRAPHED BY: R. Earlywine

SAMPLE ID (if applicable): S5

DESCRIPTION: Perspective view of Sample S5

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Marble Cliff Quarries Dump PAGE 6 OF 11

U.S. EPA ID: OHD004280897 TDD: F05-8905-012 PAN: FOH0843SB

DATE: 6-12-90

TIME: 1450

DIRECTION OF PHOTOGRAPH: WEST

WEATHER CONDITIONS: 70-80° breezy Partly Cloudy

PHOTOGRAPHED BY: R. Earlywine

SAMPLE ID (if applicable): S6

DESCRIPTION: Close up of Sample S6

DATE: 6-12-90

TIME: 1450

DIRECTION OF PHOTOGRAPH: WEST

WEATHER CONDITIONS: 70-80° breezy Partly Cloudy

PHOTOGRAPHED BY: R. Earlywine

SAMPLE ID (if applicable): S6

DESCRIPTION: Perspective view of Sample S6

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Marble Cliff Quarries Dump PAGE 7 OF 11

U.S. EPA ID: OHD004280897 TDD: F05-8905-012 PAN: FOH0843SB

DATE: 6-12-90

TIME: 1530

DIRECTION OF PHOTOGRAPH: WEST

WEATHER CONDITIONS: 70-80° breezy Partly Cloudy

PHOTOGRAPHED BY: R. Earlywine

SAMPLE ID (if applicable): S7

DESCRIPTION: Close up of Sample S7

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Marble Cliff Quarries Dump PAGE 8 OF 11

U.S. EPA ID: OHD004280897 TDD: F05-8905-012 PAN: FOH0843SB

DATE: 6-12-90

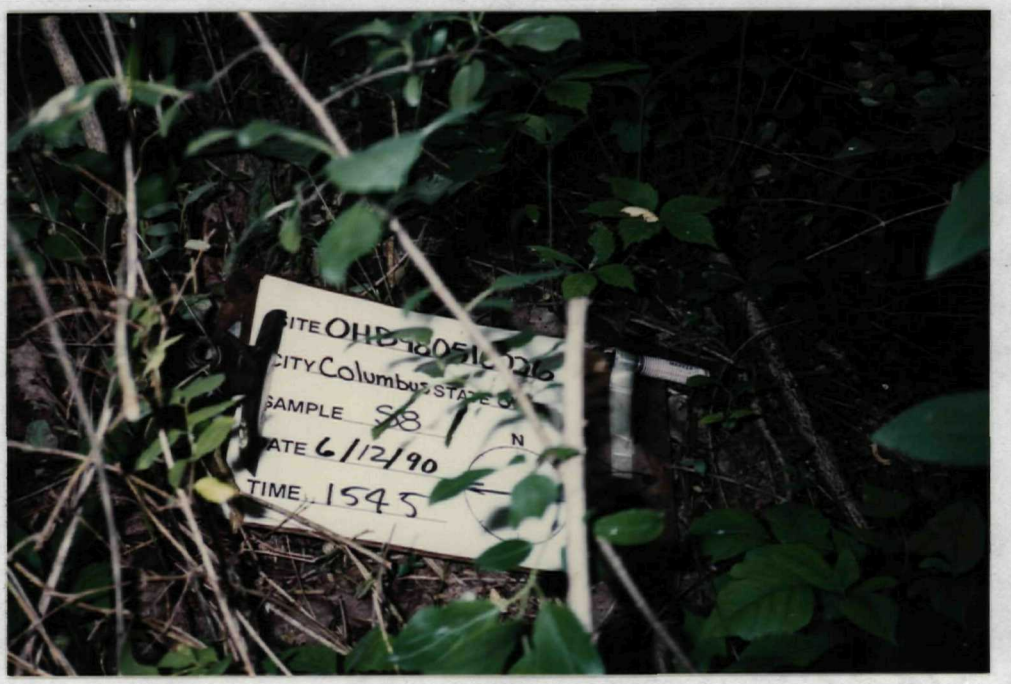
TIME: 1545

DIRECTION OF PHOTOGRAPH: WEST

WEATHER CONDITIONS: 70-80° breezy Partly Cloudy

PHOTOGRAPHED BY: R. Earlywine

SAMPLE ID (if applicable): S8



DESCRIPTION: Close up of Sample S8

DATE: 6-12-90

TIME: 1545

DIRECTION OF PHOTOGRAPH: WEST

WEATHER CONDITIONS: 70-80° breezy Partly Cloudy

PHOTOGRAPHED BY: R. Earlywine

SAMPLE ID (if applicable): S8

DESCRIPTION: Perspective view of Sample S8

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Marble Cliff Quarries Dump PAGE 9 OF 11

U.S. EPA ID: OHD004280897 TDD: F05-8905-012 PAN: FOH0843SB

DATE: 6-12-90

TIME: 1600

DIRECTION OF PHOTOGRAPH: NORTH

WEATHER CONDITIONS: 70-80° breezy Partly Cloudy

PHOTOGRAPHED BY: R. Earlywine

SAMPLE ID (if applicable): S9

DESCRIPTION: Close up of Sample S9

DATE: 6-12-90

TIME: 1600

DIRECTION OF PHOTOGRAPH: NORTH

WEATHER CONDITIONS: 70-80° breezy Partly Cloudy

PHOTOGRAPHED BY: R. Earlywine

SAMPLE ID (if applicable): S9

DESCRIPTION: Perspective view of Sample S9

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Marble Cliff Quarries Dump PAGE 10 OF 11

U.S. EPA ID: OHD004280897 TDD: F05-8905-012 PAN: FOH0843SB

DATE: 6-12-90

TIME: 1600

DIRECTION OF PHOTOGRAPH: NORTH

WEATHER CONDITIONS: 70-80° breezy Partly Cloudy

PHOTOGRAPHED BY: R. Earlywine

SAMPLE ID (if applicable): S10

DESCRIPTION: Close up of Sample S10

DATE: 6-12-90

TIME: 1600

DIRECTION OF PHOTOGRAPH: NORTH

WEATHER CONDITIONS: 70-80° breezy Partly Cloudy

PHOTOGRAPHED BY: R. Earlywine

SAMPLE ID (if applicable): S10

DESCRIPTION: Perspective view of Sample S10

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Marble Cliff Quarries Dump PAGE 11 OF 11

U.S. EPA ID: OHD004280897 TDD: F05-8905-012 PAN: FOH0843SB

DATE: 6-12-90

TIME: 1630

DIRECTION OF PHOTOGRAPH: NORTH

WEATHER CONDITIONS: 70-80° breezy Partly Cloudy

PHOTOGRAPHED BY: R. Earlywine

SAMPLE ID (if applicable): S11

DESCRIPTION: Close up of Sample S11

DATE: 6-12-90

TIME: 1630

DIRECTION OF PHOTOGRAPH: NORTH

WEATHER CONDITIONS: 70-80° breezy Partly Cloudy

PHOTOGRAPHED BY: R. Earlywine

SAMPLE ID (if applicable): S11

DESCRIPTION: Perspective view of Sample S11

APPENDIX D

U.S. EPA TARGET COMPOUND LIST AND TARGET ANALYTE LIST QUANTITATION/DETECTION LIMITS

Contract Laboratory Program
Target Compound List
Quantitation Limits

COMPOUND	CAS #	WATER	SOIL SEDIMENT SLUDGE
Chloromethane	74-87-3	10 ug/L	10 ug/Kg
Bromomethane	74-83-9	10	10
Vinyl chloride	75-01-4	10	10
Chloroethane	75-00-3	10	10
Methylene chloride	75-09-2	5	5
Acetone	67-64-1	10	5
Carbon disulfide	75-15-0	5	5
1,1-dichloroethene	75-35-4	5	5
1,1-dichloroethane	75-34-3	5	5
1,2-dichloroethene (total)	540-59-0	5	5
Chloroform	67-66-3	5	5
1,2-dichloroethane	107-06-2	5	5
2-butanone (MEK)	78-93-3	10	10
1,1,1-trichloroethane	71-55-6	5	5
Carbon tetrachloride	56-23-5	5	5
Vinyl acetate	108-05-4	10	10
Bromodichloromethane	75-27-4	5	5
1,2-dichloropropane	78-87-5	5	5
cis-1,3-dichloropropene	10061-01-5	5	5
Trichloroethene	79-01-6	5	5
Dibromochloromethane	124-48-1	5	5
1,1,2-trichloroethane	79-00-5	5	5
Benzene	71-43-2	5	5
Trans-1,3-dichloropropene	10061-02-6	5	5
Bromoform	75-25-2	5	5
4-Methyl-2-pentanone	108-10-1	10	10
2-Hexanone	591-78-6	10	10
Tetrachloroethene	127-18-4	5	5
Tolene	108-88-3	5	5
1,1,2,2-tetrachloroethane	79-34-5	5	5
Chlorobenzene	108-90-7	5	5
Ethyl benzene	100-41-4	5	5
Styrene	100-42-5	5	5
Xylenes (total)	1330-20-7	5	5

Table A
Contract Laboratory Program
Target Compound List
Semivolatiles Quantitation Limits

COMPOUND	CAS #	WATER	SOIL SEDIMENT SLUDGE
Phenol	108-95-2	10 ug/L	330 ug/Kg
bis(2-Chloroethyl) ether	111-44-4	10	330
2-Chlorophenol	95-57-8	10	330
1,3-Dichlorobenzene	541-73-1	10	330
1,4-Dichlorobenzene	106-46-7	10	330
Benzyl Alcohol	100-51-6	10	330
1,2-Dichlorobenzene	95-50-1	10	330
2-Methylphenol	95-48-7	10	330
bis(2-Chloroisopropyl) ether	108-60-1	10	330
4-Methylphenol	106-44-5	10	330
N-Nitroso-di-n-dipropylamine	621-64-7	10	330
Hexachloroethane	67-72-1	10	330
Nitrobenzene	98-95-3	10	330
Isophorone	78-59-1	10	330
2-Nitrophenol	88-75-5	10	330
2,4-Dimethylphenol	105-67-9	10	330
Benzoic Acid	65-85-0	50	1600
bis(2-Chloroethoxy) methane	111-91-1	10	330
2,4-Dichlorophenol	120-83-2	10	330
1,2,4-Trichlorobenzene	120-82-1	10	330
Naphthalene	91-20-3	10	330
4-Chloroaniline	106-47-8	10	330
Hexachlorobutadiene	87-68-3	10	300
4-Chloro-3-methylphenol	59-50-7	10	330
2-Methylnaphthalene	91-57-6	10	330
Hexachlorocyclopentadiene	77-47-4	10	330
2,4,6-Trichlorophenol	88-06-2	10	330
2,4,5-Trichlorophenol	95-95-4	50	1600
2-Chloronaphthalene	91-58-7	10	330
2-Nitroaniline	88-74-4	50	1600
Dimethylphthalate	131-11-3	10	330
Acenaphthylene	208-96-8	10	330
2,6-Dinitrotoluene	606-20-2	10	330
3-Nitroaniline	99-09-2	50	1600
Acenaphthene	83-32-9	10	330
2,4-Dinitrophenol	51-28-5	50	1600
4-Nitrophenol	100-02-7	50	1600
Dibenzofuran	132-64-9	10	330
2,4-Dinitrotoluene	121-14-2	10	330
Diethylphthalate	84-66-2	10	330
4-Chlorophenyl-phenyl ether	7005-72-3	10	330

Table A
Contract Laboratory Program
Target Compound List
Semivolatiles Quantitation Limits

COMPOUND	CAS #	WATER	SOIL SLUDGE SEDIMENT
Fluorene	86-73-7	10 ug/L	330 ug/Kg
4-Nitroaniline	100-01-6	50	1600
4,6-Dinitro-2-methylphenol	534-52-1	50	1600
N-nitrosodiphenylamine	86-30-6	10	330
4-Bromophenyl-phenylether	101-55-3	10	330
Hexachlorobenzene	118-74-1	10	330
Pentachlorophenol	87-86-5	50	1600
Phenanthrene	85-01-8	10	330
Anthracene	120-12-7	10	330
Di-n-butylphthalate	84-74-2	10	330
Fluoranthene	206-44-0	10	330
Pyrene	129-00-0	10	330
Butylbenzylphthalate	85-68-7	10	330
3,3'-Dichlorobenzidine	91-94-1	20	660
Benzo(a)anthracene	56-55-3	10	330
Chrysene	218-01-9	10	330
bis(2-Ethylhexyl)phthalate	117-81-7	10	330
Di-n-octylphthalate	117-84-0	10	330
Benzo(b)fluoranthene	205-99-2	10	330
Benzo(k)fluoranthene	207-08-9	10	330
Benzo(a)pyrene	50-32-8	10	330
Indeno(1,2,3-cd)pyrene	193-39-5	10	330
Dibenz(a,h)anthracene	53-70-3	10	330
Benzo(g,h,i)perylene	191-24-2	10	330

Table A
Contract Laboratory Program
Target Compound List
Pesticide and PCB Quantitation Limits

COMPOUND	CAS #	WATER	SOIL SEDIMENT SLUDGE
alpha-BHC	319-84-6	0.05 ug/L	8 ug/Kg
beta-BHC	319-85-7	0.05	8
delta-BHC	319-86-8	0.05	8
gamma-BHC (Lindane)	58-89-9	0.05	8
Heptachlor	76-44-8	0.05	8
Aldrin	309-00-2	0.05	8
Heptachlor epoxide	1024-57-3	0.05	8
Endosulfan I	959-98-8	0.05	8
Dieldrin	60-57-1	0.10	16
4,4'-DDE	72-55-9	0.10	16
Endrin	72-20-8	0.10	16
Endosulfan II	33213-65-9	0.10	16
4,4'-DDD	72-54-8	0.10	16
Endosulfan sulfate	1031-07-8	0.10	16
4,4'-DDT	50-29-3	0.10	16
Methoxychlor (Mariate)	72-43-5	0.5	80
Endrin ketone	53494-70-5	0.10	16
alpha-Chlordane	5103-71-9	0.5	80
gamma-chlordane	5103-74-2	0.5	80
Toxaphene	8001-35-2	1.0	160
AROCLOR-1016	12674-11-2	0.5	80
AROCLOR-1221	11104-28-2	0.5	80
AROCLOR-1232	11141-16-5	0.5	80
AROCLOR-1242	53469-21-9	0.5	80
AROCLOR-1248	12672-29-6	0.5	80
AROCLOR-1254	11097-69-1	1.0	160
AROCLOR-1260	11096-82-5	1.0	160

Table A
Contract Laboratory Program
Target Analyte List
Inorganic Quantitation Limits

COMPOUND	PROCEDURE	SOIL WATER	SEDIMENT SLUDGE
Aluminum	ICP	200 ug/L	40 mg/Kg
Antimony	Furnace	60	2.4
Arsenic	Furnace	10	2
Barium	ICP	200	40
Beryllium	ICP	5	1
Cadmium	ICP	5	1
Calcium	ICP	5000	1000
Chromium	ICP	10	2
Cobalt	ICP	50	10
Copper	ICP	25	5
Iron	Icp	100	20
Lead	Furnace	5	1
Magnesium	ICP	5000	1000
Manganese	ICP	15	3
Mercury	Cold Vapor	0.2	0.008
Nickel	ICP	40	8
Potassium	ICP	5000	1000
Selenium	Furnace	5	1
Silver	ICP	10	2
Sodium	ICP	5000	1000
Thallium	Furnace	10	2
Vanadium	ICP	50	10
Zinc	ICP	20	4
Cyanide	Color	10	2

WELL LOG AND DRILLING REPORT

ORIGINAL

1

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
Columbus, Ohio

No 153936

County Franklin Township Franklin Section of Township or Lot Number

Owner Anderson Haulage Address 3040 McKinley Ave. Cols. O.

Drilled For: Service Products Building, Inc. 3494 East Seventh Ave. Cols. 19, O BE.12719

Location of property Same - Marble Cliff Quarry That Has Been Filled Up To McKinley Ave. Level

CONSTRUCTION DETAILS

Casing diameter 8" Length of casing 73'

Type of screen None Length of screen None

Type of pump 7½ H.P. Reda Subermigble

Capacity of pump 150 G.P.M. 140' Head

Depth of pump setting 200'

PUMPING TEST

Pumping rate 150 G.P.M. Duration of test 24 hrs.

Drawdown 20' ft. Date 4 June 1957

Developed capacity Unknown

Static level—depth to water 70 ft.

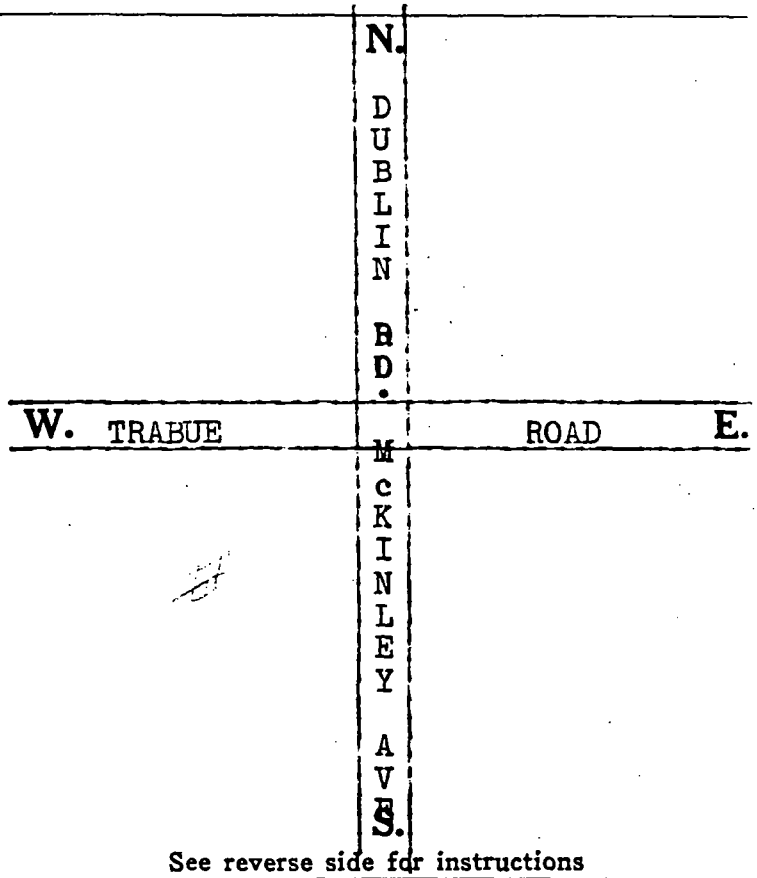
Pump installed by Sells-Suburban Well & Water Supply Dublin, Ohio

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Fill Dirt & Rocks	0 Feet	71 Ft.
Limestone	71	217

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.



See reverse side for instructions

Drilling Firm Sells-Suburban Well & Water Su Date 10 June 1957

Address Dublin, O. TU 98312 Signed Robert L. Sells

WELL LOG AND DRILLING REPORT

ORIGINAL

2

NO CARBON PAPER NECESSARY— SELF-TRANSCRIBING

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
65 S. Front St., Rm. 815 Phone (614) 469-2646
Columbus, Ohio 43215

No. 398312

County Franklin Township Franklin Section of Township

Owner Gallie Bros. Address 586 Lathrop St

Location of property 2880 McKinley ave

CONSTRUCTION DETAILS

Casing diameter 4½" Length of casing 72'

Type of screen Length of screen

Type of pump

Capacity of pump

Depth of pump setting

Date of completion

BAILING OR PUMPING TEST
(Specify one by circling)

Test Rate 8 G.P.M. Duration of test hrs.

Drawdown none ft. Date

Static level-depth to water 83 ft.

Quality (clear, cloudy, taste, odor)

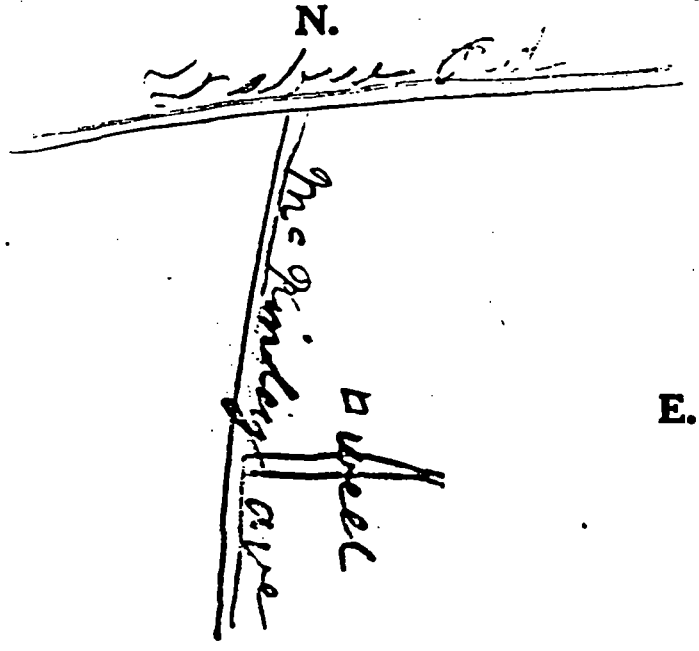
Pump installed by

WELL LOG*

Formations Sandstone, shale, limestone, gravel and clay	From	To
clay	0 Feet	2 Ft.
Broken stone	2	8
clay	8	20
Broken stone	20	22
clay	22	45
Broken stone	45	48
Clay	48	65
Broken stone	65	71
solid limestone	71	101

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.



Drilling Firm Sam Plummer & Sons Date Jan 7 1970

Address Route 1 Dublin Ohio Signed Bill Plummer

*If additional space is needed to complete well log, use next consecutive numbered form.

WELL LOG AND DRILLING REPORT

NO CARBON PAPER NECESSARY— SELF-TRANSCRIBING

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
65 S. Front St., Rm. 815 Phone (614) 469-2646
Columbus, Ohio 43215

No. 384282

3

County FRANKLIN Township NORWICH Section of Township

Owner JULIA F. TYNAN Address 542 E. BROAD ST. Col. O.

Location of property DUBLIN RD.

CONSTRUCTION DETAILS

Casing diameter 5½" O.D. Length of casing 17 ± BFG

Type of screen NONE Length of screen

Type of pump 1 HP WEBTROL SUB.

Capacity of pump 12 G.P.M.

Depth of pump setting 150 FT

Date of completion 4/1/69

BAILING OR PUMPING TEST
(Specify one by circling)

Test Rate 10 G.P.M. Duration of test 6 hrs.

Drawdown 10 ft. Date 4/1/69

Static level-depth to water 83 ft.

Quality (clear, cloudy, taste, odor)

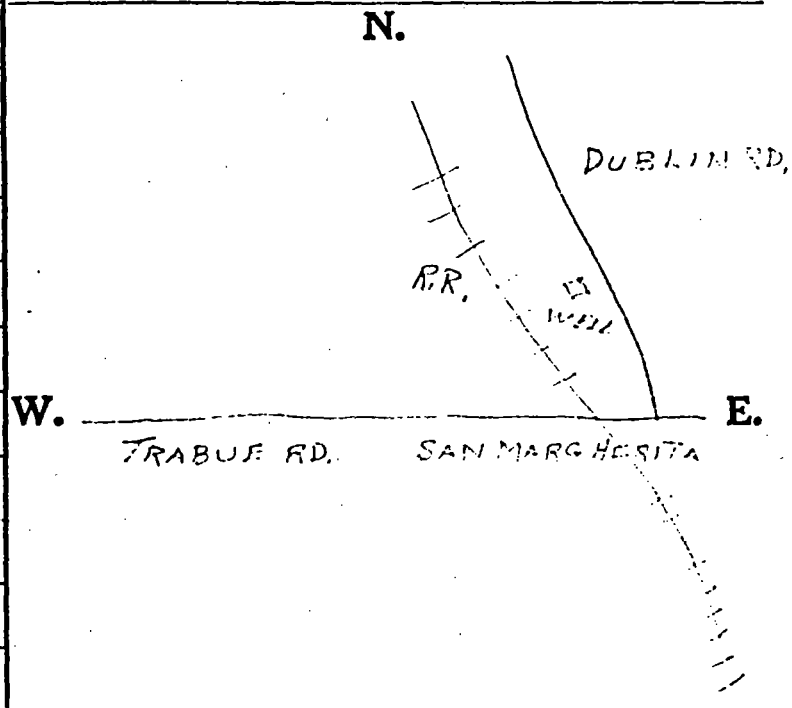
Pump installed by RAY VOLLMUTH CO.

WELL LOG*

Formations Sandstone, shale, limestone, gravel and clay	From	To
CLAY	0 Feet	2 Ft.
LIMESTONE	2	240
WATER		

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.



Drilling Firm RAY VOLLMUTH CO. Date 4/7/69

Address R#3 PATASKALA, O Signed

*If additional space is needed to complete well log, use next consecutive numbered form.

WELL LOG AND DRILLING REPORT

4

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1562 W. First Avenue
Columbus 12, Ohio

PLEASE USE PENCIL
OR TYPEWRITER
DO NOT USE INK.

Nº 314338

County: Franklin Township: Franklin Section of Township:

Owner: Robert T Earley Address: 1991 W Granville Rd Worthington O

Location of property: 9840 Fisher Rd

CONSTRUCTION DETAILS

Casing diameter: 4 1/4" Length of casing: 37'

Type of screen: Length of screen:

Type of pump:

Capacity of pump:

Depth of pump setting:

Date of completion:

BAILING OR PUMPING TEST

Pumping Rate: G.P.M. Duration of test: hrs.

Drawdown: none Date: (25 ft

Static level-depth to water: 67 ft of water ft.

Quality (clear, cloudy, taste, odor):

Bailing test 12 gal per min

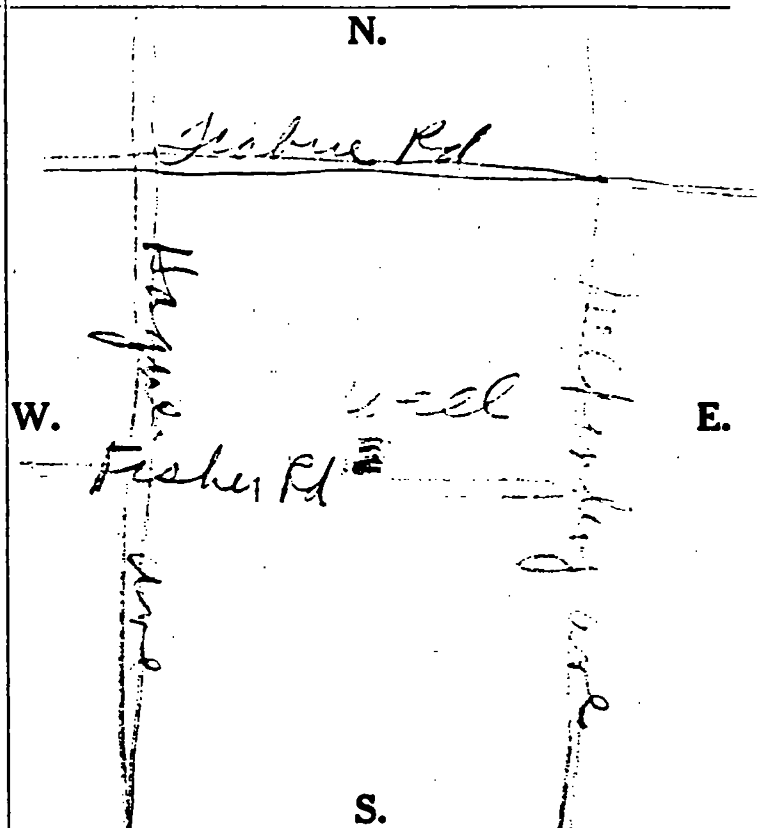
Pump installed by:

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
	0 Feet	Ft.
Clay	0	24
Stone	24	92

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.



See reverse side for instructions

Drilling Firm: Sam Plummer & Sons Date: Nov 5-65

Address: Dublin Ohio Rt 1 Signed: Sam Plummer

WELL LOG AND DRILLING REPORT

ORIGINAL

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1500 Dublin Road
Columbus, Ohio

5

No. 194881

County Franklin Township Franklin Section of Township

Owner George Jennings Construction Co. Address 750 West Lane Ave Columbus

Location of property Patton Warehouse Harrison ave. Col. O.

CONSTRUCTION DETAILS

Casing diameter 4/4" Length of casing 35'

Type of screen Length of screen

Type of pump

Capacity of pump

Depth of pump setting

Date of completion

BAILING OR PUMPING TEST

Pumping rate G.P.M. Duration of test hrs.

Drawdown None ft. Date

Developed capacity

Static level—depth to water 48 ft to water ft.

Pump installed by

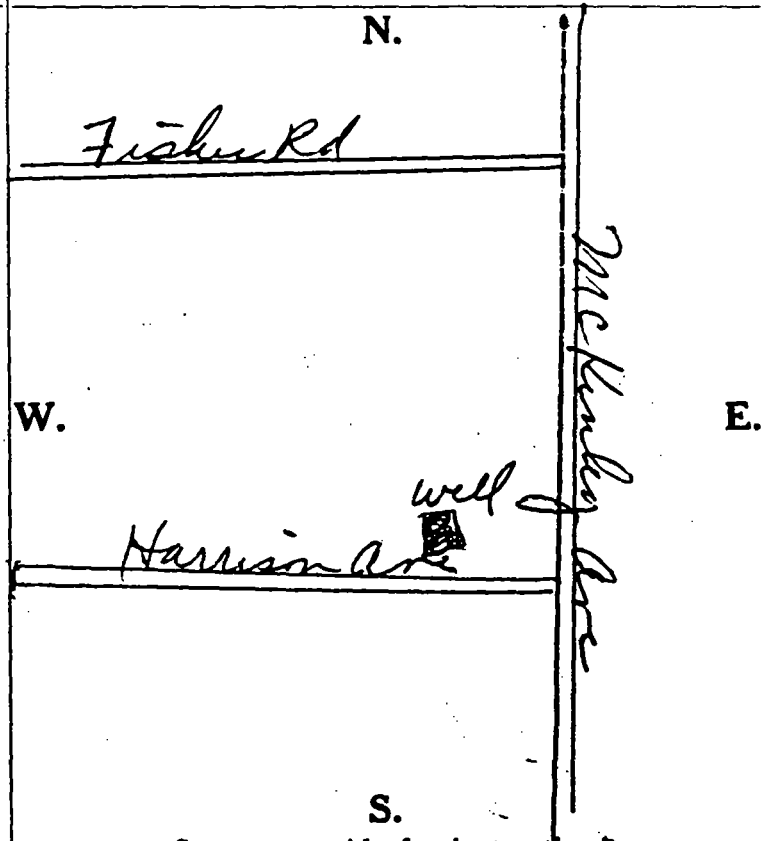
Bailing test 12 gal per min:

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From 0 Feet	To Ft.
Clay	0	5
yellow Stone	5	33
Gray Limestone	33	65
Red Limestone	65	104

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.



See reverse side for instructions

Drilling Firm Sam Plummer & Son Date Feb 26th 1958

Address Dublin O. R 1 Signed Sam Plummer

NO CARBON PAPER NECESSARY–SELF-TRANSCRIBING

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Geological Survey
Fountain Square
Columbus, Ohio 43224 Phone (614) 466-5344

472637

6

COUNTY Franklin TOWNSHIP Cols. SECTION OF TOWNSHIP OR LOT NUMBER ____

OWNER Andy Miller ADDRESS 2200 McKinley Ave

LOCATION OF PROPERTY McKinley – Harrison Ave.

CONSTRUCTION DETAILS

Casing diameter 4 1/4 Length of casing 67

Type of screen ____ Length of screen ____

Type of pump ____

Capacity of pump ____

Depth of pump setting ____

Date of completion ____

BAILING OR PUMPING TEST
(specify one by circling)

Test rate 10 gpm Duration of test 1 1/2 hrs

Drawdown 8 ft Date Oct 21-1974

Static level (depth to water) 38 ft

Quality (clear, cloudy, taste, odor) Cloudy

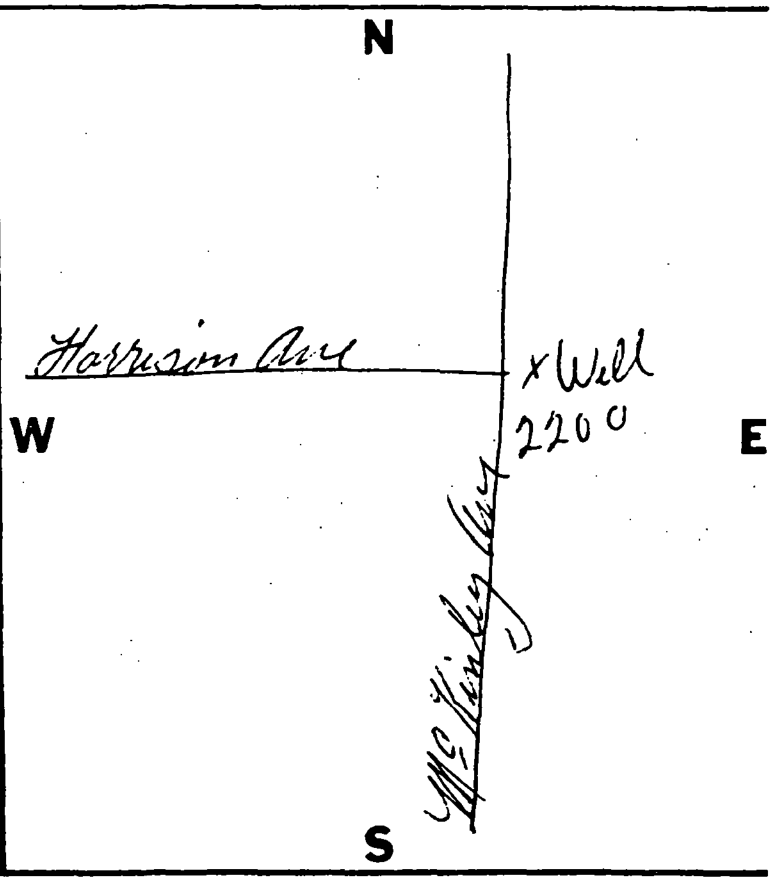
Pump installed by ____

WELL LOG*

Formations: sandstone, shale, limestone, gravel, clay	From	To
Dry Gravel	0 ft	17 ft
Sand	17	20
Rock	20	58
Red Clay	58	61
Solid Rock	61	157

SKETCH SHOWING LOCATION

Locate in reference to numbered state highways, street intersections, county roads, etc.



DRILLING FIRM Merle Wright DATE Oct 21-1974

ADDRESS Smith Rd Orient O Rt 1 SIGNED Joseph Eckler

*If additional space is needed to complete well log, use next consecutive numbered form.

NO CARBON PAPER NECESSARY– SELF-TRANSCRIBING

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
Fountain Square
Columbus, Ohio 43224

639348

7

COUNTY Franklin TOWNSHIP Columbus SECTION OF TOWNSHIP

OWNER Alaskan Insulation, Inc ADDRESS 2179 McKinley Ave

LOCATION OF PROPERTY 2179 McKinley Ave., Cols., Ohio

CONSTRUCTION DETAILS

Casing diameter 5" Length of casing 90'

Type of screen Length of screen

Type of pump

Capacity of pump

Depth of pump setting

Date of completion

BAILING OR PUMPING TEST
(specify one by circling)

Test rate 210 gpm Duration of test one hrs

Drawdown ft Date 8-23-83

Static level (depth to water) 43' ft

Quality (clear, cloudy, taste, odor)

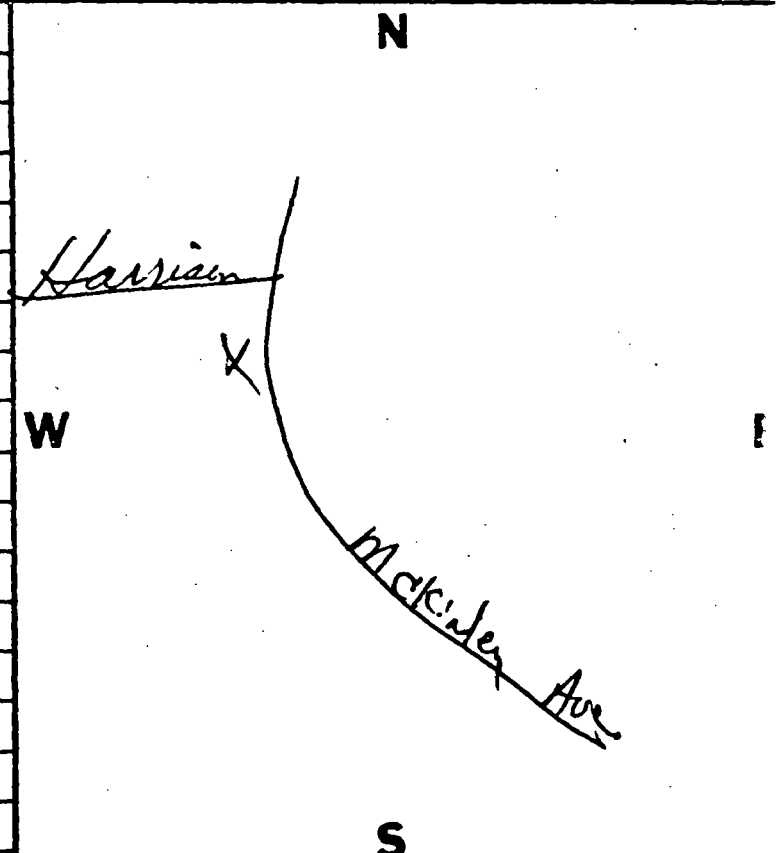
Pump installed by

WELL LOG*

Formations: sandstone, shale, limestone, gravel, clay	From	To
Clay	0 ft	13 ft
Limestone w/clay	13	120
Cavern	120	128
Limestone	128	140

SKETCH SHOWING LOCATION

Locate in reference to numbered state highways, street intersections, county roads, etc.



DRILLING FIRM R. C. Barry Co. DATE August 23, 1983

ADDRESS Galloway, Ohio SIGNED Everett Reenah

*If additional space is needed to complete well log, use next consecutive numbered form.

ORIGINAL COPY - ODNR, DIVISION OF WATER, FOUNTAIN SQ., COLS., OHIO 43224

WELL LOG AND DRILLING REPORT

NO CARBON PAPER NECESSARY - SELF-TRANSCRIBING

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
Fountain Square
Columbus, Ohio 43224

637934 8

COUNTY Franklin TOWNSHIP Franklin SECTION OF TOWNSHIP _____

OWNER John Baljak ADDRESS 3459 Trabue Rd

LOCATION OF PROPERTY Trabue Rd

CONSTRUCTION DETAILS

Casing diameter 4 1/4" Length of casing 106'

Type of screen _____ Length of screen _____

Type of pump _____

Capacity of pump _____

Depth of pump setting _____

Date of completion _____

BAILING OR PUMPING TEST
(specify one by circling)

Test rate 8 gpm Duration of test _____ hrs

Drawdown none ft Date _____

Static level (depth to water) 42 ft

Quality (clear, cloudy, taste, odor) _____

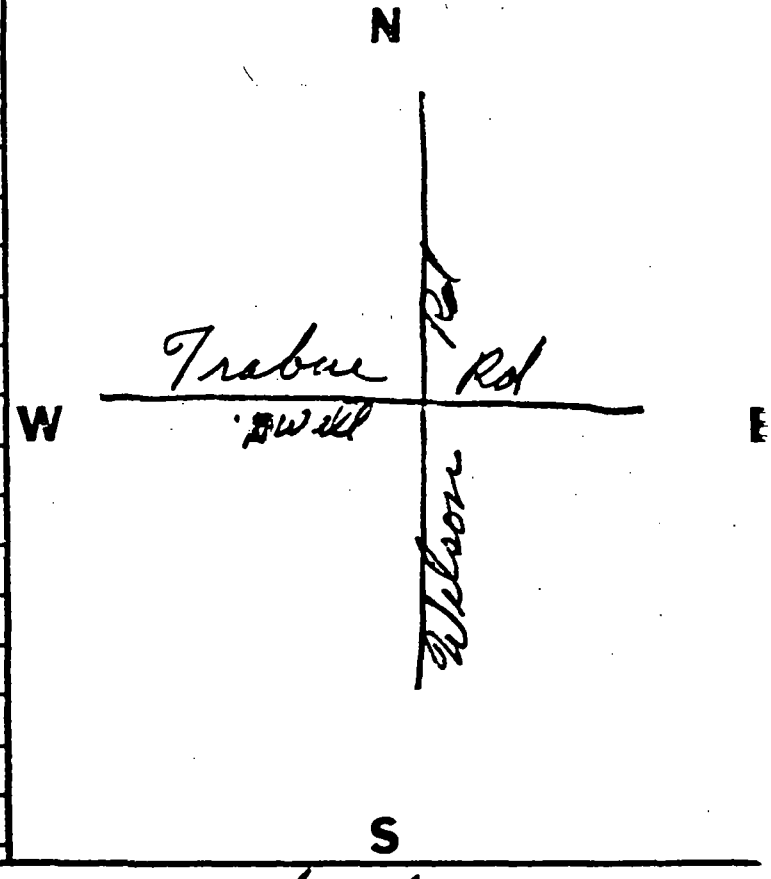
Pump installed by _____

WELL LOG*

Formations: sandstone, shale, limestone, gravel, clay	From	To
Clay	0 ft	10 ft
Bankrun Gravel	10	28
Clay	28	102
Limestone	102	107

SKETCH SHOWING LOCATION

Locate in reference to numbered state highways, street intersections, county roads, etc.



DRILLING FIRM Sam Plummer & Sons DATE 15 Sept 83

ADDRESS Route 4 Dublin Ohio SIGNED Eddie Plummer

*If additional space is needed to complete well log, use next consecutive numbered form.

ORIGINAL COPY - ODNR, DIVISION OF WATER, FOUNTAIN SQ., COLS., OHIO 43224

WELL LOG AND DRILLING REPORT

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
Columbus, Ohio

9

No 141710

County Franklin Township Franklin Section of Township or Lot Number

Owner C. J. Detamore Address 1515 Ashland Ave. Columbus, Ohio

Location of property 4699 Trabue Rd.

CONSTRUCTION DETAILS

Casing diameter 4¼" Length of casing 79 ft.

Type of screen None Length of screen

Type of pump

Capacity of pump

Depth of pump setting

PUMPING TEST

Pumping rate G.P.M. Duration of test hrs.

Drawdown None ft. Date

Developed capacity

Static level—depth to water 40 ft.

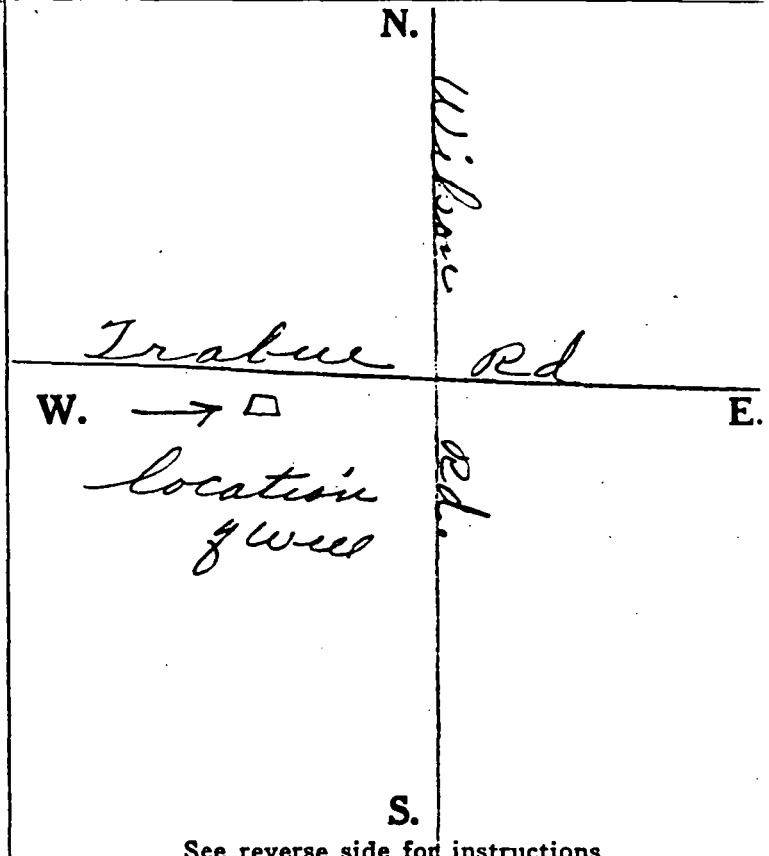
Pump installed by Tested By Bailis

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Clay	0 Feet	27 Ft.
Gravel	27	35
Clay	35	40
Gravel	40	60
Clay	60	78
Limestone	78	86

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.



See reverse side for instructions

Drilling Firm Plummer Bros Date Oct. 26/54

Address Dublin Ohio Signed H. L. Plummer

NO CARBON PAPER NECESSARY— SELF-TRANSCRIBING

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
65 S. Front St., Rm. 815 Phone (614) 469-2646
Columbus, Ohio 43215

429035

10

County Franklin Township Norwich Section of Township

Owner Russell Seely Address 3265 Walcutt Rd

Location of property 7 Northeast of RT40 on Walcutt Rd.

CONSTRUCTION DETAILS

Casing diameter 4½ Length of casing 56ft

Type of screen Length of screen

Type of pump

Capacity of pump 10 GPM

Depth of pump setting

Date of completion

BAILING OR PUMPING TEST
(Specify one by circling)

Test Rate 10 G.P.M. Duration of test 2 hrs

Drawdown None ft. Date 4-26-72

Static level-depth to water 7.5 ft.

Quality (clear, cloudy, taste, odor) Clear

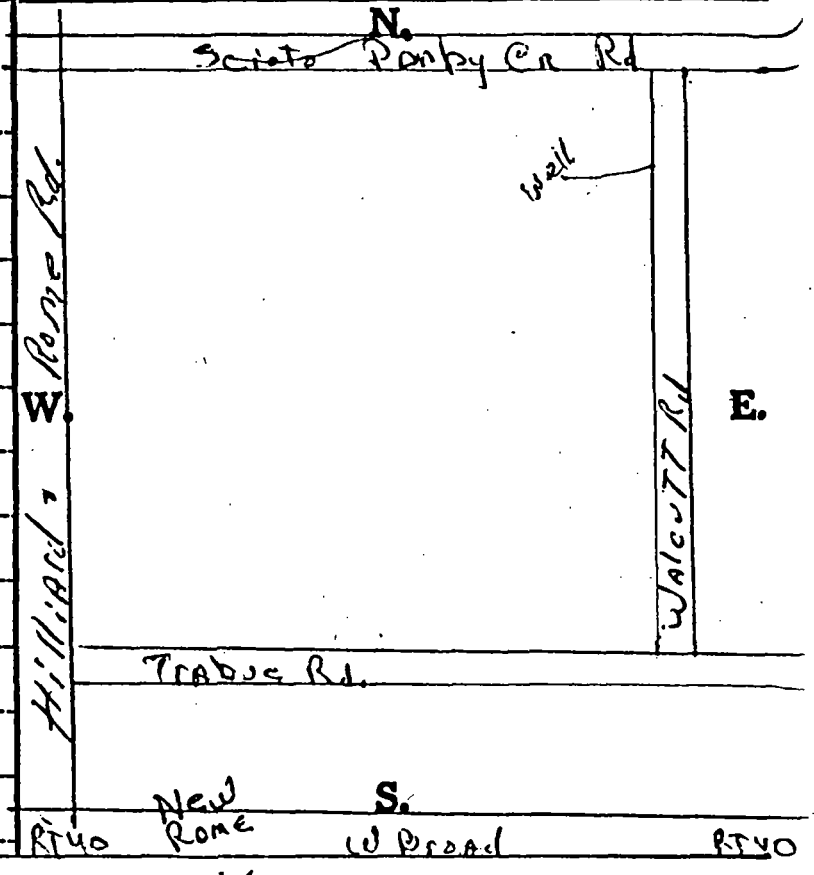
Pump installed by

WELL LOG*

Formations Sandstone, shale, limestone, gravel and clay	From	To
Blue Clay	0 Feet	45 Ft.
Sand	45	49
Yellow Clay	49	55
Pource/Rock	55	56
Limestone	56	138
Well AT 138		

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.



Drilling Firm C. A. Underhill Date 4-27-72

Address 1182 Hubbard Road Signed Charles A Underhill Sr.
Galloway Ohio 43119

*If additional space is needed to complete well log, use next consecutive numbered form.

WELL LOG AND DRILLING REPORT

554211

11

NO CARBON PAPER NECESSARY - SELF-TRANSCRIBING

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
Fountain Square
Columbus, Ohio 43224

Permit Number 63

COUNTY Franklin TOWNSHIP Norwich Hilliard SECTION OF TOWNSHIP

OWNER Keepers Landscape ADDRESS 3872 Scioto Darby Cr. Rd.

LOCATION OF PROPERTY Same

CONSTRUCTION DETAILS

Casing diameter 6" Length of casing 77'

Type of screen Length of screen

Type of pump

Capacity of pump

Depth of pump setting

Date of completion

Rotary ☐ or Cable ☐

BAILING OR PUMPING TEST
(specify one by circling)

Test rate 60+ gpm Duration of test 1 hrs

Drawdown ft Date 4-25-86

Static level (depth to water) 25 ft

Quality (clear, cloudy, taste, odor)

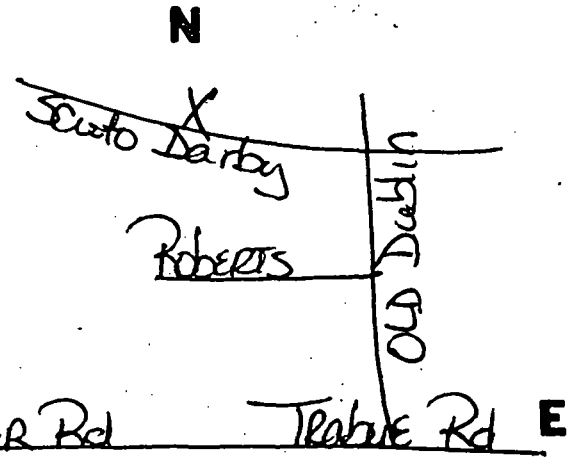
Pump installed by

WELL LOG*

Formations: sandstone, shale, limestone, gravel, clay	From	To
Clay	0 ft	8 ft
Sand & Gravel	8	12
Clay	12	30
Sand & Gravel	30	33
Clay	33	45
Clay & Gravel Mixed	45	48
Gravel	48	63
Broken Limestone	63	67
Limestone	67	132

SKETCH SHOWING LOCATION

Locate in reference to numbered state highways, street intersections, county roads, etc.



* If additional space is needed to complete well log, use next consecutively numbered form.

DNR 7802

DRILLING FIRM R.C. Barry Inc. REGISTRATION NUMBER 288 DATE April 25 1986

ADDRESS Galloway, Ohio 43119 SIGNED Everett Meenach

Completion of this form is required by 1521.05, Ohio Revised Code - file within 30 days after completion.

WHITE ORIGINAL COPY - ODNR, DIVISION OF WATER, FOUNTAIN SQ., COLS., OHIO 43224 / Blue - Customer's Copy / Pink - Driller's Copy / Green - Local Health Dept. Copy

GOU S-552

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
Columbus, Ohio

No. 111250

12

County Franklin Township Norwich Section of Township or Lot Number

Owner Delmer Sparks Address Hilliard Ohio - R.F.D.

Location of property 4420 Scioto Darby Rd.

CONSTRUCTION DETAILS

Casing diameter 4 1/4 Length of casing 72'

Type of screen None Length of screen

Type of pump

Capacity of pump

Depth of pump setting

PUMPING TEST

Pumping rate G.P.M. Duration of test hrs.

Drawdown None ft. Date

Developed capacity

Static level—depth to water 20 ft.

Pump installed by Test Pit By Bailing

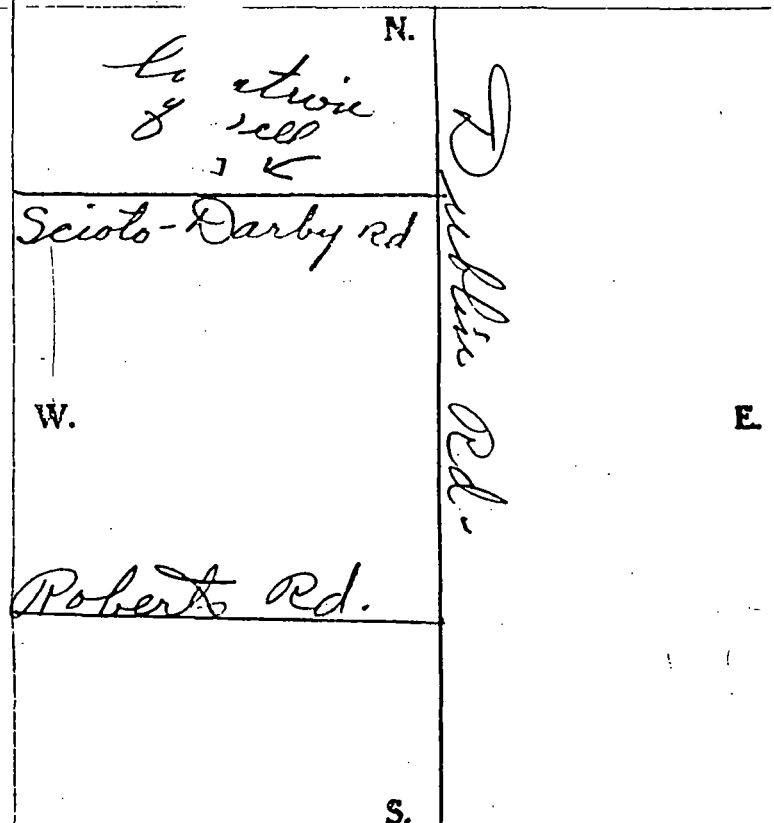
WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Clay	0 Feet	65 Ft.
sand	65	68
limestone	68	81

X = 1,828,100
Y = 126400-N

SKETCH SHOWING LOCATION

State Highways, St. Intersections, County roads, etc.



See reverse side for instructions

Drilling Firm Plummer Bros Date Sept. 28/53

Address Dublin Ohio Signed W. L. Plummer

PLEASE USE PENCIL OR TYPEWRITER DO NOT USE INK.

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1562 W. First Avenue
Columbus 12, Ohio

No 324621
13

County Franklin Township Norwich Section of Township [illegible] Rd.

Owner Andover Construction Co Address 2572 Andover Rd. Columbus 21 - Ohio

Location of property 3359 Sunnybrook Dr.

CONSTRUCTION DETAILS

Casing diameter 4 1/4" Length of casing 59'

Type of screen None Length of screen

Type of pump Submersible

Capacity of pump 600 gal. per hr.

Depth of pump setting 84 ft.

Date of completion June 14/65

BAILING OR PUMPING TEST

Pumping Rate 15 G.P.M. Duration of test 2 hrs.

Drawdown None ft. Date

Static level-depth to water 44 ft.

Quality (clear, cloudy, taste, odor)

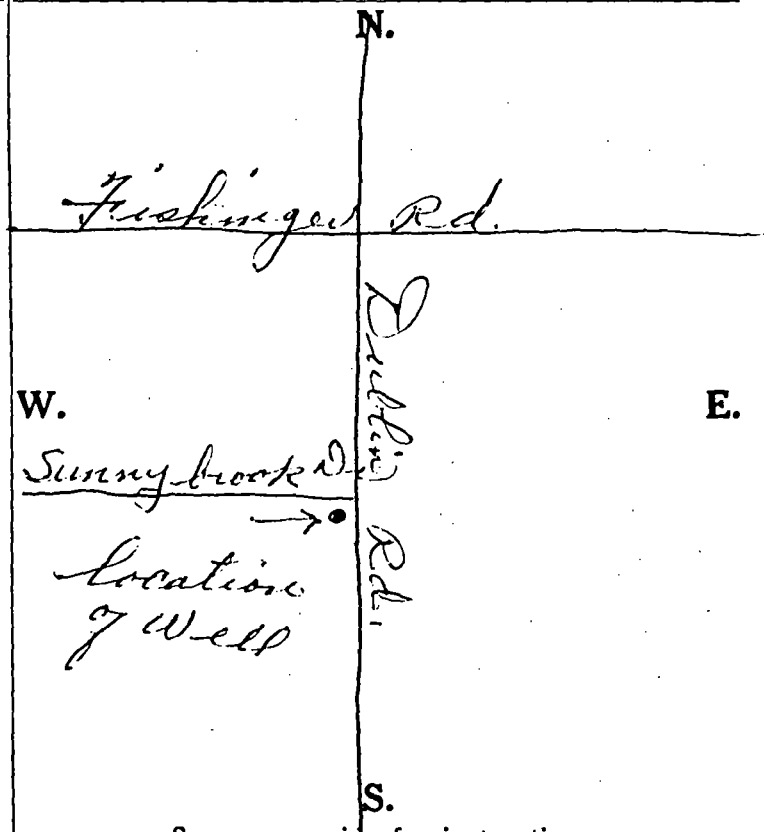
Pump installed by Harold Plummer

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Clay	0 Feet	8 Ft.
Limestone	8	120

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.



See reverse side for instructions

Drilling Firm Plummer Bros

Address 330 N. Riverview St. Dublin Ohio

Date June 14/65

Signed Harold L. Plummer

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
Columbus, Ohio

No 111218
14

County Franklin Township Norwich Section of Township or Lot Number 4200 Dublin Rd.
Owner Mark Stewart Address Colo - Ohio
Location of property 3091 - Fisher Rd.

CONSTRUCTION DETAILS

Casing diameter 4 1/4" Length of casing 30'
Type of screen None Length of screen
Type of pump
Capacity of pump
Depth of pump setting 95 ft.

PUMPING TEST

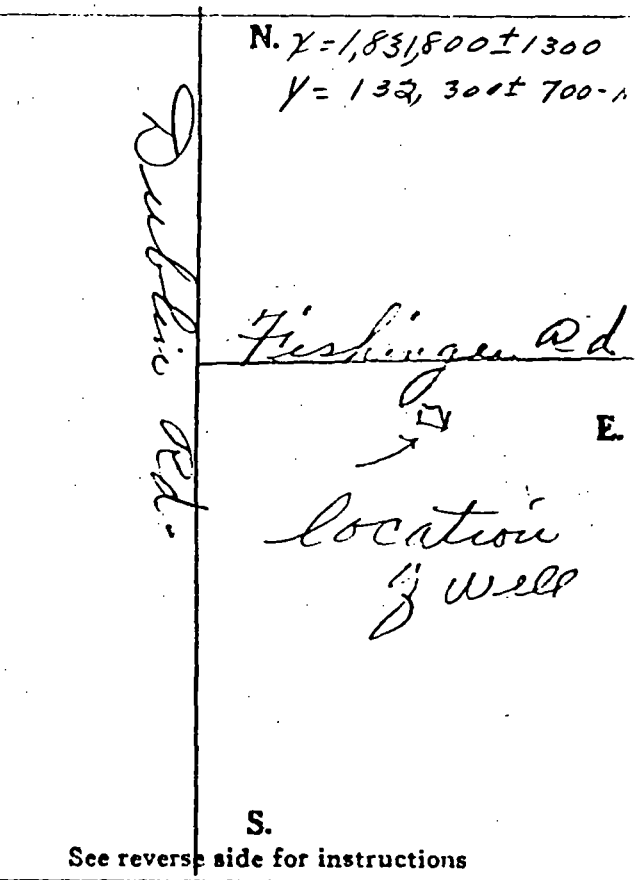
Pumping rate G.P.M. Duration of test hr
Drawdown None ft. Date
Developed capacity
Static level—depth to water 80 ft
Pump installed by Tested By Bailing

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Clay	0 Feet	15 Ft.
limestone	15	117

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.



See reverse side for instructions

Drilling Firm Plummer Bros
Address Dublin Ohio
Date July 3/53
Signed H. L. Plummer

Lot No. 6

WE LOG AND DRILLING RE ORT

15

NO CARBON PAPER NECESSARY – SELF-TRANSCRIBING

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
Fountain Square
Columbus, Ohio 43224

634002

COUNTY Franklin TOWNSHIP Norwich SECTION OF TOWNSHIP

OWNER Sue Stephenson ADDRESS 3911 Davidson Rd Cols. O.

LOCATION OF PROPERTY Same

CONSTRUCTION DETAILS

Casing diameter 5 3/4 O.D. Length of casing 29'

Type of screen — Length of screen

Type of pump

Capacity of pump

Depth of pump setting Set pump at 25'

Date of completion Aug 1/86

BAILING OR PUMPING TEST
(specify one by circling)

Test rate 12 gpm Duration of test 1 hrs

Drawdown — ft Date

Static level (depth to water) 15' ft

Quality (clear, cloudy, taste, odor)

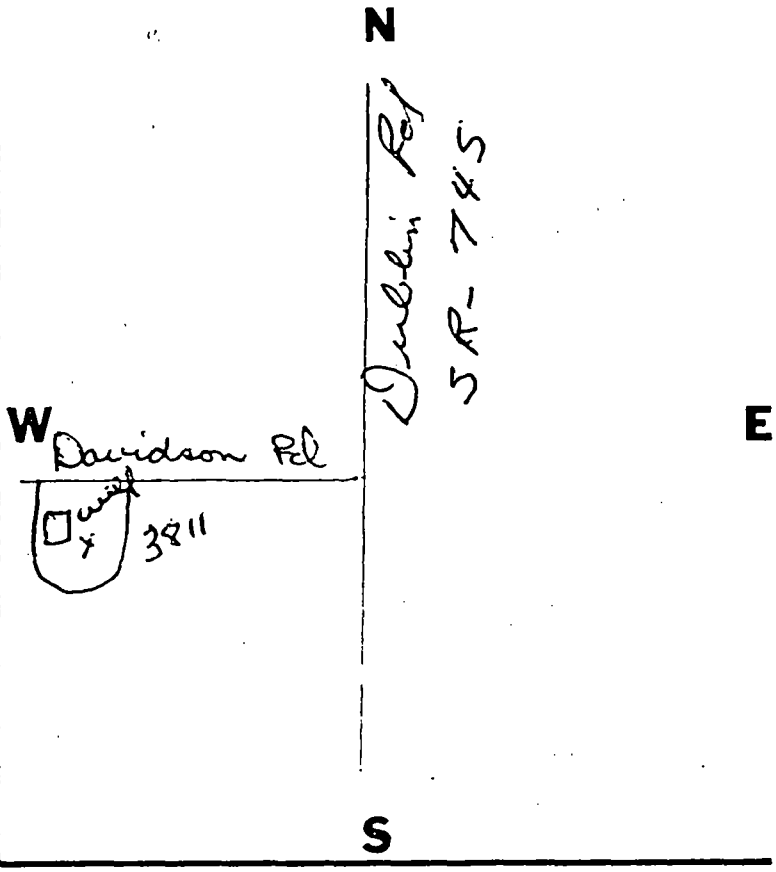
Pump installed by Tested By Test Pump

WELL LOG*

Formations: sandstone, shale, limestone, gravel, clay	From	To
Clay & Gravel	0 ft	28 ft
Limestone	28	32

SKETCH SHOWING LOCATION

Locate in reference to numbered state highways, street intersections, county roads, etc.



DRILLING FIRM Art C. Plummer - Son

ADDRESS Box 753 1160 W. Mohawk Dr. Powell O.

DATE Aug 1/86

SIGNED Robert J. Plummer

*If additional space is needed to complete well log, use next consecutive numbered form.

ORIGINAL COPY - ODNR DIVISION OF WATER, FOUNTAIN SQ., COLS., OHIO 43224

45

ORIGINAL

WELL LOG AND DRILLING REPORT

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1500 Dublin Road
Columbus, Ohio

16

No. 186169

County Franklin Township NORWICH Section of Township South East

Owner Berlin-Defenbaugh Address 409 W Fifth St

Location of property 3960 Saturn Dr 200 yds N of Shirtzinger

CONSTRUCTION DETAILS	
Casing diameter	4½
Length of casing	82
Type of screen	
Length of screen	
Type of pump	Sumerg
Capacity of pump	10 GPM
Depth of pump setting	47 ft
Date of completion	4-4-58

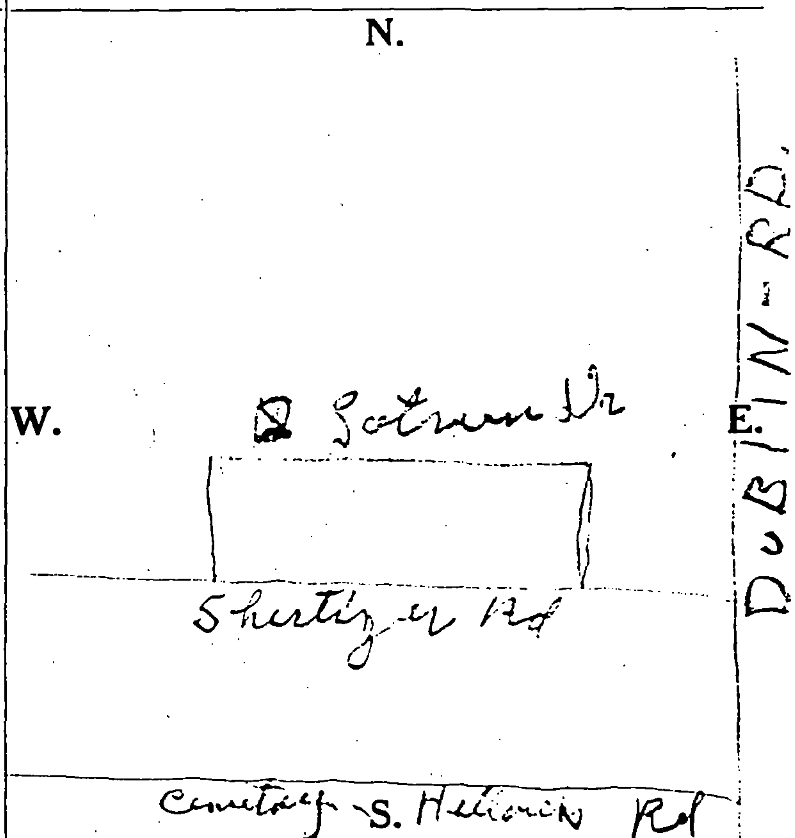
BAILING OR PUMPING TEST	
Pumping rate	10 G.P.M.
Duration of test	2 hrs.
Drawdown	None ft.
Date	4-4-58
Developed capacity	
Static level—depth to water	9 ft.
Pump installed by	Emmett [illegible]

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Clay	0 Feet	24 Ft.
B-Clay-S	24	48
Sand-G	48	82
lime Stone	82	89
Water at 85 ft		

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.



See reverse side for instructions

Drilling Firm Emmett [illegible] Date 4-4-58

Address 2445 [illegible] Signed Emmett [illegible]

D186

ORIGINAL

C2 17

WELL LOG AND DRILLING REPORT

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1500 Dublin Road
Columbus, Ohio

No. 208429

County Franklin Township Norwich Section of Township

Owner Ralph Falor Address 1824 Roxbury Columbus - 8 O.

Location of property Carriage Dr. off Dublin Rd.

CONSTRUCTION DETAILS

Casing diameter 4¼" Length of casing 110'

Type of screen None Length of screen

Type of pump

Capacity of pump

Depth of pump setting

Date of completion

BAILING OR PUMPING TEST

Pumping rate G.P.M. Duration of test hrs.

Drawdown None ft. Date

Developed capacity 1000 Gals Per Hr.

Static level—depth to water 48 ft.

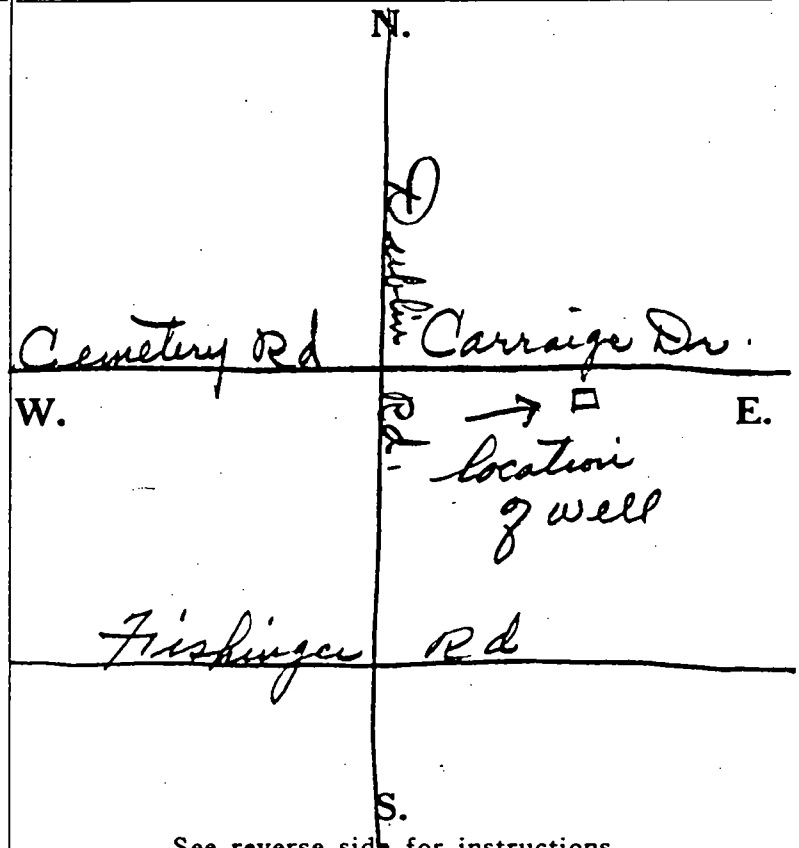
Pump installed by

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Gravel	0 Feet	31 Ft.
limestone	31	140

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.



See reverse side for instructions

Drilling Firm Plummer Bros

Address Dublin Ohio

Date Apr. 13/59

Signed W. L. Plummer

305

WELL LOG AND DRILLING REPORT

ORIGINAL

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1500 Dublin Road
Columbus, Ohio

16 24 18

No. 188687

County Franklin Township Norwich Section of Township

Owner Mack Stewart Address 1856 Northwest Blvd. Columbus, Ohio

Location of property 3535 Polley Rd.

CONSTRUCTION DETAILS

Casing diameter 4¼" Length of casing 69'

Type of screen None Length of screen

Type of pump

Capacity of pump

Depth of pump setting

Date of completion

BAILING OR PUMPING TEST

Pumping rate G.P.M. Duration of test hrs.

Drawdown None ft. Date

Developed capacity

Static level—depth to water 45 ft.

Pump installed by

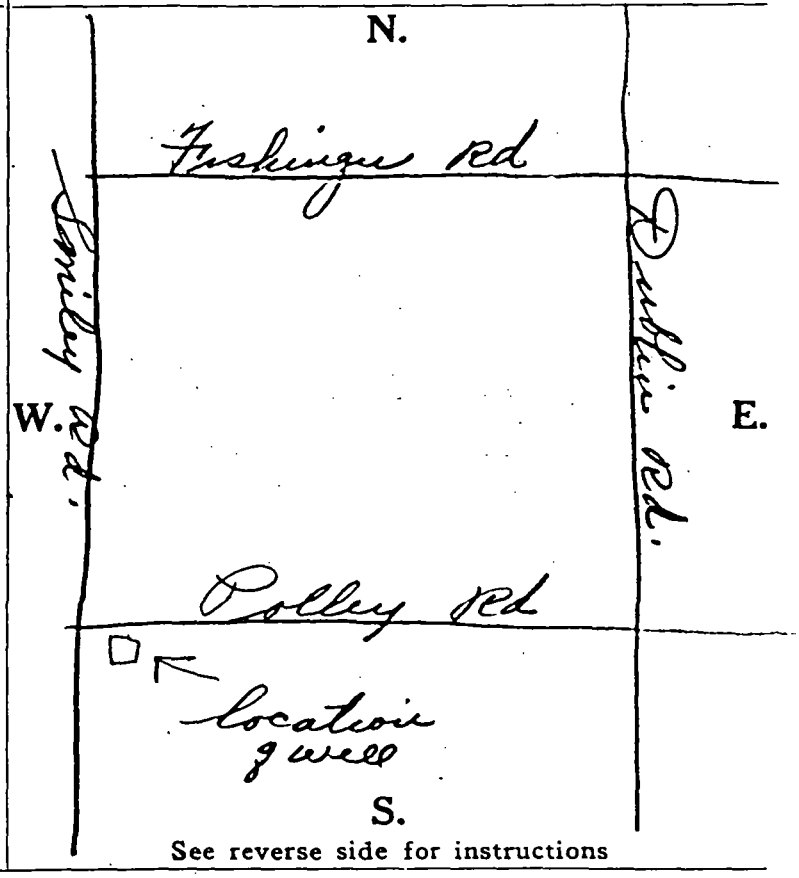
Tested By Bailing

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Clay	0 Feet	6 Ft.
limestone	6	120

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.



See reverse side for instructions

Drilling Firm Plummer Bro's Date Apr. 22/57

Address Dublin Ohio Signed W. L. Plummer

H410

WELL LOG AND DRILLING REPORT

ORIGINAL

16 19

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
Columbus, Ohio

No 141707

County Franklin Township Norwich Section of Township or Lot Number 4200 - Dublin Rd.

Owner Mark Stewart Address Columbus, Ohio

Location of property 3219 - Polley Rd -

CONSTRUCTION DETAILS

Casing diameter 4¼ Length of casing 66'

Type of screen None Length of screen

Type of pump

Capacity of pump ~~Same~~

Depth of pump setting 85 ft.

PUMPING TEST

Pumping rate G.P.M. Duration of test hrs.

Drawdown None ft. Date

Developed capacity

Static level—depth to water 68 ft.

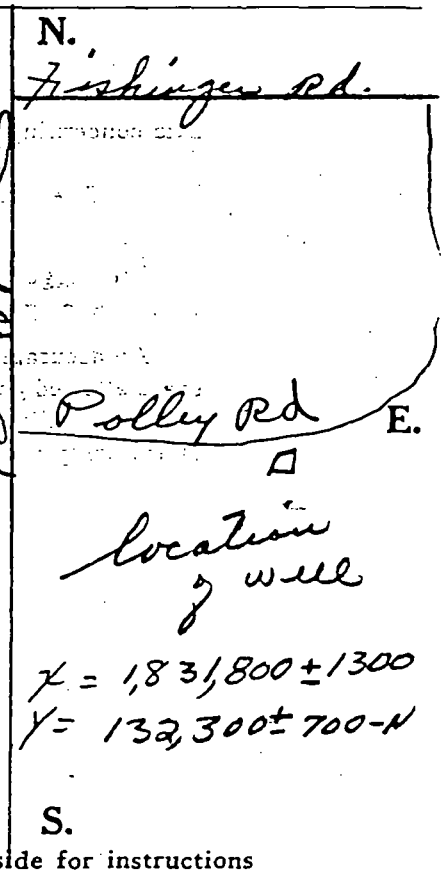
Pump installed by

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Clay	0 Feet	12 Ft.
limestone	12	114

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.



See reverse side for instructions

Drilling Firm Plummer Bros Date Oct. 26/54

Address Dublin Ohio Signed H. L. Plummer

H427

WELL LOG AND DRILLING REPORT

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PLEASE USE PENCIL OR TYPEWRITER DO NOT USE INK.

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1562 W. First Avenue
Columbus 12, Ohio

No 316341

County Franklin Township Norwich Section of Township

Owner Robert Pearson Address 633 Scioto-Darby Rd. Hilliard Ohio

Location of property 3455 Smiley Rd.

CONSTRUCTION DETAILS

Casing diameter 4 1/4" Length of casing 31'

Type of screen None Length of screen

Type of pump 1/2 H.P. Submersible

Capacity of pump 600 gal. Per hr.

Depth of pump setting 84 ft.

Date of completion

BAILING OR PUMPING TEST

Pumping Rate 15 G.P.M. Duration of test 2 hrs.

Drawdown None ft. Date

Static level-depth to water 65 ft.

Quality (clear, cloudy, taste, odor)

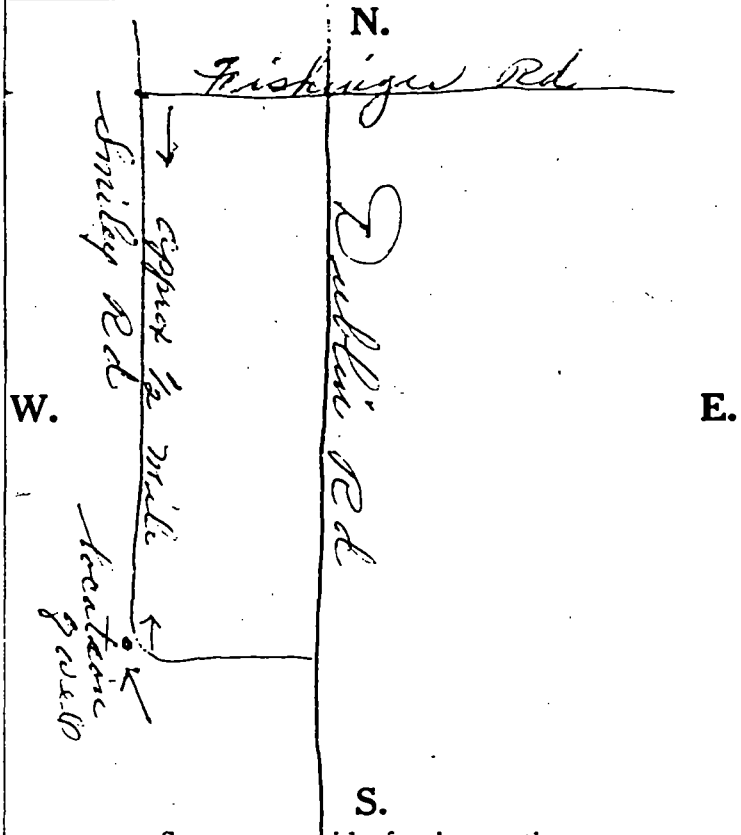
Pump installed by Leo. Plummer

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Clay	0 Feet	8 Ft.
Limestone	8	113

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.



See reverse side for instructions

Drilling Firm Plummer Bros Date Nov 28/64

Address 530 N. Riverview St. Dublin Ohio Signed Harold L. Plummer

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ecology and environment, inc.
111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415
International Specialists in the Environment

MEMORANDUM

DATE: 9-17-90

TO: William Messenger, Chief Pre-Remedial Unit

FROM: Jerome D. Oskvarek, FIT Office Manager

SUBJECT: Screening Site Inspection Transmittal Memorandum

CERCLIS Site Name: Marble Cliff Quarries Dump

City: Columbus

State: Ohio

U.S. EPA ID No.: OHD 004280897

SSID No.: N/A

TDD No.: F05-8905-012

PAN: F0H0843SB

THIS DOCUMENT IS CONFIDENTIAL. Due to the predecisional nature of this memorandum, this memorandum and its attachments are not to be released. The (draft)/final (circle) Screening Site Inspection (SSI) report accompanies this transmittal memorandum and its attachments. Based on the information gathered during the SSI and other available information, the FIT has recalculated the preliminary and projected HRS 1 scores. These scores and factor values are presented below.

1

HRS 1 PRELIMINARY AND PROJECTED SCORES

PRELIMINARY HRS SCORE BASED ON THE SCREENING SITE INSPECTION (SSI)
(This score is based on information from the screening site inspection.)

S_M= 21.01 S_{FE}= 0 S_{DC}= 50.00

PROJECTED HRS SCORE FOR A LISTING SITE INSPECTION (LSI)
(This score is based on the expected acquisition of information from the listing site inspection.)

S_M= 26.12 S_{FE}= 0 S_{DC}= 50.00

HRS 1 score worksheets are attached to this memorandum.

IMMEDIATE ACTION

In addition to the HRS related information, we have evaluated this site for the need for immediate removal action as a result of a substantial threat to either human health or the environment. (Select one)

_____ The site does present a threat which requires immediate removal action.

X The site does not present a threat which requires immediate removal action.

RECOMMENDATIONS

Based on the HRS related information and the evaluation of the immediate removal threat, the FIT concludes from its activities the following (select one):

_____ 1. The HRS 1 scores are below 25.00; therefore, the site should be designated as a NFRAP facility.

_____ 2. The HRS 1 scores are equal to or exceed 25.00; however, due to extenuating circumstances (i.e., ongoing clean-up) the site should not be designated for LSI activities.

X 3. The HRS 1 scores are equal to or exceed 25.00. As a result, we recommend that the site be designated as a potential LSI candidate. The FIT anticipates that the following activities would be required during the LSI in order to establish a sufficient data base to successfully list the facility on the NPL.

X a. Installation of monitoring wells.
_____ b. Air sampling.
_____ c. Further sampling of surface water.
X d. Further waste characterization.
_____ e. More extensive sampling of residential wells and municipal vells.
X f. Collect additional soil samples.
X g. Perform geophysics.
_____ h. Conduct area survey.
_____ i. Other: _____

_____

COMMENTS

The PIT would like to make the following additional comments concerning the site.

1. According to file information the waste was deposited in a mudseam, however if this mudseam is not continuous because of active quarrying around the site it would not inhibit migration into groundwater.
2. Several different TAL analytes and TCL compounds were found in soil samples.
3. Because there are no on-site monitoring wells; accurate information regarding possible migration of wastes to groundwater is unattainable.

SCREENING SITE INSPECTION
PRELIMINARY AND PROJECTED
HAZARD RANKING SYSTEM
REVISED SCORE WORKSHEETS

Site Name: Marble Cliff Quarries Dump (Cercles Name)
Columbus Coated Fabrics Dump (a.k.a.)

Address: 3101 Trabue Road

City/County/State/Zip: Columbus / Franklin / Ohio / 43212

Cerclis ID: OHD004280897 SS ID: N/A

Prepared by: R. Earlywine, E&E Date: 9-17-90

Reviewed by: J. f Kolb, E&E Date: 9/21/90

TDD: F05-8905-012 PAN: F01H0843SB

SCREENING SITE INSPECTION (SSI) PRELIMINARY HRS SCORE

S_M= 21.01 S_{FE}= 0 S_{DC}= 50.00

LISTING SITE INSPECTION (LSI) PROJECTED HRS SCORE

S_M= 26.12 S_{FE}= 0 S_{DC}= 50.00

SCREENING SITE INSPECTION (SSI) PRELIMINARY HRS SCORE

(This score is based on information from the SSI.)

	S	S^2
Groundwater Route (S_{gw}=)	35.79	1280.92
Surface Water Route (S_{sw}=)	6.38	40.70
Air Route (S_a =)	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		1321.62
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		36.35
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}/1.73 = S_M$ =		21.01

LISTING SITE INSPECTION (LSI) PROJECTED HRS SCORE

(This score is based on the expected acquisition of information from the LSI.)

	S	S^2
Groundwater Route (S_{gw}=)	44.74	2001.67
Surface Water Route (S_{sw}=)	6.38	40.70
Air Route (S_a =)	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		2042.37
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		45.19
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}/1.73 = S_M$ =		26.12

GROUNDWATER ROUTE

SCREENING SITE INSPECTION (SSI) PRELIMINARY HRS SCORE

(This score is based on information from the SSI.)

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Description	Ref. #
1 Observed Release	(0) 45	x1	0		
If Observed Release scores 45 proceed to line 4 If Observed Release scores 0 proceed to line 2					
2 Route Characteristics				Aquifer Description: LIMESTONE	
Depth to Aquifer of concern	0 1 2 (3)	x2	6	0 ft.	1
Net Precipitation	0 1 (2) 3	x1	2	Precip. 37 Evap. 32	3
Permeability of the Unsaturated Zone	0 (1) 2 3	x1	1	10^{-6} cm/sec	1
Physical State	0 1 2 (3)	x1	3	liquid & sludge	1
Total Route Characteristics Score			12		
3 Containment	0 1 2 (3)	x1	3	NO LINER OR diversion control system	
4 Waste Characteristics					
Persistence	0 1 2 3				
Toxicity	0: 0 0 0 0 1: 3 6 9 12 2: 6 9 12 15 3: 9 12 15 18	x1	18	Heavy Metals	1
Haz. Waste Quantity	0 (1) 2 3 4 5 6 7 8	x1	1	UNKNOWN	1
Total Waste Characteristics Score			19		
5 Targets					
Groundwater Use	0 1 (2) 3	x3	6	DRINKING WATER with Alternate Sources	1
Distance to Nearest Well	0 1 2 (3) 4			-	
Population Served	0: 0 0 0 0 0 1: 0 4 6 8 10 2: 0 8 12 16 20 (3): 0 12 18 (24) 30 4: 0 16 24 32 35 5: 0 20 30 35 40	x1	24	1/2 Mile 2,349 people	1,2 1,2
Total Targets Score			30		
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5			20,520		
7 Divide line 6 by 57,330 and multiply by 100			S_{gw} = 35.79		

GROUNDWATER ROUTE

LISTING SITE INSPECTION (LSI) PROJECTED HRS SCORE

(This score is based on the expected acquisition of information from the LSI)

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Description	Ref. #
1 Observed Release	0 (45)	x1	45	INSTALL MONITORING WELLS	1
If Observed Release scores 45 proceed to line 4 If Observed Release scores 0 proceed to line 2					
2 Route Characteristics				Aquifer Description:	
Depth to Aquifer of concern	0 1 2 3	x2		ft.	
Net Precipitation	0 1 2 3	x1		Precip. Evap.	
Permeability of the Unsaturated Zone	0 1 2 3	x1		cm/sec	
Physical State	0 1 2 3	x1			
Total Route Characteristics Score					
3 Containment	0 1 2 3	x1			
4 Waste Characteristics					
Persistence	0 1 2 (3)				
Toxicity	(3) (18)	x1	18	HEAVY METALS	1
Haz. Waste Quantity	0 (1) 2 3 4 5 6 7 8	x1	1	UNKNOWN	1
Total Waste Characteristics Score			19		
5 Targets					
Groundwater Use	0 1 (2) 3	x3	6	Drinking water with alternate sources	1
Distance to Nearest Well	0 1 2 (3) 4				
Population Served	(3) (24)			1/2 Mile	1,2
		x1	24	2,349	1,2
Total Targets Score			30		
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5			25,650		
7 Divide line 6 by 57,330 and multiply by 100			S_{gw} = 44.74		

SURFACE WATER ROUTE

SCREENING SITE INSPECTION (SSI) PRELIMINARY HRS SCORE

(This score is based on information from the SSI.)

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Description	Ref. #
1 Observed Release	(0) 45	x1	0		
If Observed Release scores 45 proceed to line 4 If Observed Release scores 0 proceed to line 2					
2 Route Characteristics				Facil ≤ 3 %	1,2
Intervening Terrain / Facility Slope	0 0 0 (0) 3 (0) 1 1 (2) 3 0 1 2 2 3 0 2 2 3 3 0 2 3 3 3	x1	2	Interv ≥ 8 %	1,2
1-yr. 24 hr Rainfall	0 (1) 2 3	x1	1	2 in.	4
Distance to Nearest Surface Water	0 1 2 (3)	x2	6	0.1 mile	1,2
Physical State	0 1 2 (3)	x1	3	liquid sludge	1
Total Route Characteristics Score			12		
3 Containment	0 1 2 (3)	x1	3	NO LINER OR DIVERSION SYSTEM	1
4 Waste Characteristics					
Persistence	0 1 2 (3)				
Toxicity	0: 0 0 0 0 1: 3 6 9 12 2: 6 9 12 15 (3): 9 12 15 (18)	x1	18	HEAVY METALS	1
Haz. Waste Quantity	0 (1) 2 3 4 5 6 7 8	x1	1	UNKNOWN	1
Total Waste Characteristics Score			19		
5 Targets					
Surface Water Use	0 1 (2) 3	x3	6	Boating Recreation	1
Dist. to Sensitive Environment	(0) 1 2 3	x2	0	> 2 Miles	1
Population Served / Distance to Water Intake Downstream	(0) 0 0 0 0 0 4 6 8 10 0 8 12 16 20 0 12 18 24 30 0 16 24 32 35 0 20 30 35 40	x1	0	> 3 Miles	1,2
Total Targets Score			6		
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5			4104		
7 Divide line 6 by 64,350 and multiply by 100		S_{sw} =	6.38		

SURFACE WATER ROUTE

LISTING SITE INSPECTION (LSI) PROJECTED HRS SCORE

(This score is based on the expected acquisition of information from the LSI.)

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Description	Ref. #
1 Observed Release	(0) 45	x1	0		
☒ Observed Release scores 45 proceed to line 4 ☒ Observed Release scores 0 proceed to line 2					
2 Route Characteristics				Facil ≤ 3 %	1, 2
Intervening Terrain / Facility Slope (0 0 0 (0) 3; (0) 1 1 (2) 3; 0 1 2 2 3; 0 2 2 3 3; 0 2 3 3 3)		x1	2	Interv ≥ 8 %	1, 2
1-yr. 24 hr Rainfall	0 1 2 3	x1	1	2 in.	4
Distance to Nearest Surface Water	0 1 2 3	x2	6	0.1 miles	1, 2
Physical State	0 1 2 3	x1	3	liquid sludge	1
Total Route Characteristics Score			12		
3 Containment	0 1 2 3	x1	3	NO LINER OR DIVERSION SYSTEM	1
4 Waste Characteristics					
Persistence / Toxicity (0: 0 0 0 0; 1: 3 6 9 12; 2: 6 9 12 15; 3: 9 12 15 18)		x1	18	Heavy Metals	1
Haz. Waste Quantity	0 1 2 3 4 5 6 7 8	x1	1	UNKNOWN	1
Total Waste Characteristics Score			19		
5 Targets					
Surface Water Use	0 1 2 3	x3	6	Boating Recreation	1
Dist. to Sensitive Environment	0 1 2 3	x2	0	> 2 Miles	1
Population Served / Distance to Water Intake Downstream (0: 0 0 0 0 0; 0: 0 4 6 8 10; 0: 8 12 16 20; 0: 12 18 24 30; 0: 16 24 32 35; 0: 20 30 35 40)		x1	0	> 3 Miles	1, 2
Total Targets Score			6		
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5			4,104		
7 Divide line 6 by 64,350 and multiply by 100		S_{sw} =	6.38		

AIR ROUTE

SCREENING SITE INSPECTION (SSI) PRELIMINARY HRS SCORE

(This score is based on information from the SSL)

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Description	Ref. #
1 Observed Release	(0) 45	x1	0		
If line 1 is 0, the S_a=0. Enter on line 5 If line 1 is 45, then proceed to line 2					
2 Waste Characteristics					
Reactivity & Incompatability	0 1 2 3	x1			
Toxicity	0 1 2 3	x3			
Haz. Waste Quantity	0 1 2 3 4 5 6 7 8	x1			
Total Waste Characteristics Score					
3 Targets					
Population within 4-mile Radius	Dist to Population: 0 0 0 0 / 9 12 15 18 / 12 15 18 21 / 15 18 21 24 / 18 21 24 27 / 21 24 27 30 (Pop)	x1			
Distance to Sensitive Environment	0 1 2 3	x2			
Land Use	0 1 2 3	x1			
Total Targets Score					
4 Multiply 1 x 2 x 3					
5 Divide line 4 by 35,100 and multiply by 100			S_a = 0		

FIT did not document a release of TCL compounds or TAL analytes to the air during the SSI.. Reference #1

AIR ROUTE

LISTING SITE INSPECTION (LSI) PROJECTED HRS SCORE :
(This score is based on the expected acquisition of information from the LSI)

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Description	Ref. #
1 Observed Release	(0) 45	x1	0		
If line 1 is 0, the S_a=0. Enter on line 5 If line 1 is 45, then proceed to line 2					
2 Waste Characteristics					
Reactivity & Incompatability	0 1 2 3	x1			
Toxicity	0 1 2 3	x3			
Haz. Waste Quantity	0 1 2 3 4 5 6 7 8	x1			
Total Waste Characteristics Score					
3 Targets					
Population within 4-mile Radius	Dist to Population Pop. 0 0 0 0 9 12 15 18 12 15 18 21 15 18 21 24 18 21 24 27 21 24 27 30	x1			
Distance to Sensitive Environment	0 1 2 3	x2			
Land Use	0 1 2 3	x1			
Total Targets Score					
4 Multiply 1 x 2 x 3					
5 Divide line 4 by 35,100 and multiply by 100			S_a = 0		

An observed release to air was not documented during the SSI and will not be addressed during the LSI stage.
Reference # 1

FIRE AND EXPLOSION

SCREENING SITE INSPECTION (SSI) PRELIMINARY HRS SCORE
(This score is based on information from the SSI)

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Description	Ref. #
1 Containment	0 3	x1			
2 Waste Characteristics					
Direct Evidence	0 3	x1			
Ignitability	0 1 2 3	x1			
Reactivity	0 1 2 3	x1			
Incompatability	0 1 2 3	x1			
Haz. Waste Quantity	0 1 2 3 4 5 6 7 8	x1			
	Total Waste Characteristics Score				
3 Targets					
Dist. to Nearest Pop.	0 1 2 3 4 5	x1			
Dist. to Nearest Bldg.	0 1 2 3	x1			
Dist. to Sensitive Env.	0 1 2 3	x1			
Land Use	0 1 2 3	x1			
Pop. Within 2 miles	0 1 2 3 4 5	x1			
Bldgs. Within 2 miles	0 1 2 3 4 5	x1			
	Total Targets Score				
4 Multiply 1 x 2 x 3					
5 Divide line 4 by 1,440 and multiply by 100			S_{FE} = 0		

SITE does not pose a fire and explosion threat. Route will not be scored (see reference #5)

FIRE AND EXPLOSION

LISTING SITE INSPECTION (LSI) PROJECTED HRS SCORE
(This score is based on the expected acquisition of information from the LSI)

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Description	Ref. #
1 Containment	0 3	x1			
2 Waste Characteristics					
Direct Evidence	0 3	x1			
Ignitability	0 1 2 3	x1			
Reactivity	0 1 2 3	x1			
Incompatability	0 1 2 3	x1			
Haz. Waste Quantity	0 1 2 3 4 5 6 7 8	x1			
Total Waste Characteristics Score					
3 Targets					
Dist. to Nearest Pop.	0 1 2 3 4 5	x1			
Dist. to Nearest Bldg.	0 1 2 3	x1			
Dist. to Sensitive Env.	0 1 2 3	x1			
Land Use	0 1 2 3	x1			
Pop. Within 2 miles	0 1 2 3 4 5	x1			
Bldgs. Within 2 miles	0 1 2 3 4 5	x1			
Total Targets Score					
4 Multiply 1 x 2 x 3					
5 Divide line 4 by 1,440 and multiply by 100			S_{FE} = 0		

Site does not pose a significant fire and explosion threat. Route will not be scored. See Reference #5

DIRECT CONTACT

SCREENING SITE INSPECTION (SSI) PRELIMINARY HRS SCORE
(This score is based on information from the SSL)

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Description	Ref. #
1 Observed Incident	(0) 45	x1	0		
If line 1 is 45, proceed to line 4 If line 1 is 0, proceed to line 2					
2 Accessibility	0 1 2 (3)	x1	3	Inadequate Fencing uncontrolled access roads	1
3 Containment	0 (15)	x1	15	Inadequate cover	1
4 Waste Characteristics					
Toxicity	0 1 2 (3)	x5	15	HEAVY METALS	1
5 Targets					
Pop. Within 1 mile	0 1 2 3 (4) 5	x4	16	3600 people	1, 2
Dist. to Crit. Habitat	(0) 1 2 3	x4	0	> 1 Mile	1, 2
	Total Targets Score		16		
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5			10,800		
7 Divide line 6 by 21,600 and multiply by 100			S_{OC} = 50.00		

DIRECT CONTACT

LISTING SITE INSPECTION (LSI) PROJECTED HRS SCORE
(This score is based on the expected acquisition of information from the LSI.)

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Description	Ref. #
1 Observed Incident	0 45	x1			
If line 1 is 45, proceed to line 4 If line 1 is 0, proceed to line 2					
2 Accessibility	0 1 2 (3)	x1	3	Inadequate Fencing Uncontrolled access roads	1
3 Containment	0 (15)	x1	15	Inadequate cover	1
4 Waste Characteristics					
Toxicity	0 1 2 (3)	x5	15	HEAVY METALS	1
5 Targets					
Pop. Within 1 mile	0 1 2 3 (4) 5	x4	16	3600 people	1,2
Dist. to Crit. Habitat	(0) 1 2 3	x4	0	> 1 Mile	1,2
	Total Targets Score		16		
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5			10,800		
7 Divide line 6 by 21,600 and multiply by 100			S_{OC} = 50.00		

REFERENCE DOCUMENTATION SHEET

Ref.#	DESCRIPTION OF REFERENCE
1	Screening Site Inspection Report of Marble Cliff Quarries Dump. Prepared by Randy Earlywine of Ecology and Environment Inc. TDD # F05-8905-012
2	U.S. Geological Survey, Hillard (1966/1973), Northwest Columbus (1965/1982), Galloway (1966/1981) Southwest Columbus (1965/1982)
3	U.S. Dept. of Commerce, National Climatic Center, Climatic Atlas of the United States. 1979 Ashville NorthCarolina
4	Rainfall Frequency Atlas of the United States Department of Commerce, U.S. Gov't printing office, Washington D.C., 1963. Technical paper No. 40.

REFERENCE DOCUMENTATION SHEET

Ref.#	DESCRIPTION OF REFERENCE
5	Chief Tiddle, Marble Cliff Fire Department. Contacted by Randy Earlywine 2-16-90. Ecology and Environment Inc.